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DYSMENORRHEA.

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San Francisco, Cal.

Read before the San Francisco Obstetrical Society.

Pain in the region of the uterus and ovaries, is the rule with the majority of women at the time of the menstrual flow, and varies from a feeling of uneasiness during the first 24 hours to that of severe suffering during the entire period of the flow. It is only considered pathological when the woman's health is thereby impaired, or the pain is unusually severe.

The function of menstruation is a physiological one, and in order that the latter part of this paper may be more clearly understood, it will be well to here consider briefly its natural history. It is claimed, and with some reason, that the monthly loss of blood by the human female is a consequence of the habits of civilization. It does not occur among the lower animals excepting in the case of the apes, the females having a show of blood at the time of heat, when they are kept in confinement.

As is well known, the generally accepted theory of the cause of menstruation is the extrusion of an ovum from the ovary, and that the congestion of the pelvic organs is caused by, and is a consequence of, this ovulation. This theory, however, has met with considerable opposition of late years. It is well known that a woman may have a number of children without ever menstruating, and the abdomen has been frequently opened in menstruating women where there was no sign or symptom in the ovaries of the expulsion or maturation of an ovum. On the other hand, I have repeatedly opened the abdomen midway between the menstrual periods and found that an ovum had just escaped, or was about to escape, from the ovary.

It would seem to me that a more reasonable explanation of the monthly congestion, accompanied with a discharge of blood from the uterus, is a rythmical or periodic congestion of the pelvic vessels and the denudation of the epithelium of the uterine mucous membrane in a woman capable of fecundation. This better prepares the uterus for the reception and growth of the fecundated ovum, and gives exit from the body of the woman to a certain amount of blood and material that would have been used in the growth of the child during pregnancy.

Whatever may be the theory concerning the cause of menstruation, there are certain facts which can be easily demonstrated, and which are universally accepted. (1) That for some days before the appearance of the flow there is an increased amount of blood in the pelvic organs and vessels. There is also at this time an increased amount of secretion from the uterus and vagina. (2) That during the discharge of blood there is an exfoliation of the epithelium which lines the cavity of the uterus. (3) That following the menstrual flow the pelvic congestion subsides. For the purposes of this paper it will not be necessary to go extensively into the theory of the causes of this function, as it is intended more for the discussion of the practical matters connected with the treatment of the pain which so frequently accompanies it.

The term dysmenorrhea is intended to designate a symptom, not a disease, and as the causes of dysmenorrhea may be various, it will be necessary to go thoroughly into the merits of each case before we can have an intelligent opinion in regard to its diagnosis or prognosis. In estimating the amount of pain in a given case the individual characteristics must be considered. What would be very severe pain with one woman would be considered a very slight or moderate amount of pain in another. In other words, the capacity for bearing pain differs greatly with individuals. An anemic, thin, little woman, whose nutrition is poor, who has inherited from a dyspeptic father or a tuberculous mother a poor condition of nutrition, whose habits of life have led to the development of her brain and nervous system rather than to the development of good muscles and good circulation, necessarily would suffer more pain during menstruation, other things being equal, than a big, broad-backed, red-faced German or Irish woman who had a less sensitive brain and nervous system, and a better stomach and better muscles.

In the first instance we have an illustration of what would be called a neuralgic or hyperesthetic diathesis. It is claimed, and doubtless it is true in rare instances, that where we have the constitutional taint of gout or rheumatism, these also may be an element in the cause of painful menstruation, but I must confess that for years I have not seen a case where it seemed to me that gout or rheumatism appeared to cut any figure as a cause. In a woman who is very susceptible to pain, it requires but little to produce it, and the simple physiological congestion of the pelvic organs at the time of menstruation is quite sufficient to cause a greater or less degree of pain, quite independent of there being necessarily any special disease of these organs. Nevertheless, it would seem that no one can treat a case of dysmenorrhea intelligently without a thorough and careful examination of the organs which are the seat of the pain. While there is a natural repugnance on the part of most physicians to making a manual examination of the sexual organs of a young unmarried woman, it is unquestionably bad practice to give drugs and advice continuously in any case of dysmenorrhea without making a thorough and careful examination of the pelvic organs. It certainly will end in failure, in a large proportion of cases, to effect any good, and it will bring discredit upon the art of medicine.

Judging from my own observation, a common cause of dysmenorrhea in young girls is a morbid condition and sensibility of the nervous system, consequent upon too much confinement in the schools, and excessive development of the brain and of the nervous system at the expense of bodily strength. Various of the bodily functions are carried on with more or less discomfort and pain. In such girls the monthly congestion becomes, at least so far as the symptoms go, pathological, and the exfoliation of the epithelium of the uterine mucous membrane is accompanied with much suffering. The enlargement of an ovarian follicle, the expulsion of an ovum, the hemorrhage from the sac, being, as it is, a very decided lesion, leaving a blood-clot as large as the end of the finger in the ovary, all are sufficient, in a woman sensitive to pain, to result in an amount of disturbance that interferes seriously with her health and comfort. Sedentary habits and lack of exercise, particularly if accompanied by habitual constipation, accentuate this monthly congestion and prolong it. The veins about the pelvis become enlarged and varicose, the pelvic tissue thickened and sensitive to the touch, and in addition to increased pain at the time of menstruation the woman is never free from a sense of weight and discomfort about the pelvis, this symptom being aggravated and increased by any unusual exertion.

Displacements and deformities of the uterus, particularly retroversion and retroflexion, are also a cause. While it is true that a woman may have a retroversion or a retroflexion of the uterus for years without there being any local or general symptoms to attract attention to this condition, nevertheless I believe that very few women can go for many years during their menstrual life with a marked deformity of this kind without giving evidence of either general or local symptoms which demand attention. A dislocation of the ovary, one or both, into Douglas' pouch is a not infrequent cause of dysmenorrhea. Salpingitis I believe to be a common cause of painful menstruation. During the past ten years it has been very clearly shown, both at *post-mortem* examinations and in laparotomies for various abdominal diseases, that salpingitis, or disease of the Fallopian tubes, in some form, is a frequent occurrence.

In a small proportion of cases of dysmenorrhea it will be found that an obstruction to the escape of the blood exists either at the internal or external os. This may be a result of a retro or anteflexion of the uterus, or a stenosis of the external os. In rarer cases, instead of an exfoliation of the epithelium lining the uterine canal, the mucous membrane becomes very much thickened, and instead of coming away in small fragments is cast off in one large piece and expelled entire from the uterus, this expulsion being attended with great pain, and being known as membranous dysmenorrhea. The pathology is not very clear, but the cause would appear to be an unusually thickened condition of the mucous membrane from some unknown source, which, instead of being expelled in small fragments is thrown off as a whole. Writers on this subject mention as a common cause of dysmenorrhea the sequelæ of pelvic peritonitis. In my experience this has not been a common cause, and I believe that the so-called cases of chronic peritonitis and chronic ovaritis are in a large proportion cases of chronic salpingitis. This opinion is based not so much upon information gained from manual and bi-manual examinations of cases as upon knowledge obtained from laparotomies for chronic pelvic disease.

Necessarily the prognosis will depend upon the cause and upon our ability to remove it. The differential diagnosis is not always easy. It is somewhat difficult for the patient to accurately locate the site of the pain. In my own practice the only rule that seems to be of practical value is, that if the pain comes on for one or two days or more before the flow appears, the site of the disease is usually outside of the uterus, either in the ovaries, the Fallopian tubes, or the connective tissue about the uterus; whereas, if the pain comes on simultaneously with the appearance of the flow, the pain is probably due to some obstruction, or to some disorder of the uterine cavity. If the pain comes on simultaneously with the flow, becoming very severe periodically, with intervals of relief from pain, then the probabilities are that the cause is some obstruction, or partial obstruction, to the escape of blood.

By far the most unsatisfactory cases to treat are those where the fault seems to lie mainly in a morbid state of the nutrition and an unhealthy condition of the nervous system. No treatment in these cases seems to be of much value, excepting that directed to the improvement of the general state, and this treatment so long as it is applied to a patient who remains in the same surroundings, is often most unsatisfactory. She has fallen, as it were, into a rut, from which it is difficult to remove her, unless her associations and habits are changed and broken up. Where it can be shown that there is no structural disease of the pelvic organs, no treatment is so serviceable in these cases as an entire change of surroundings, a journey to a distant place, a change of food, climate, change of habits, and freedom from mental worry, care or anxiety.

This plan certainly should supersede all others where practicable. Unfortunately it cannot always be carried out, and we are forced to make the best use we can of the opportunities within our power. The application of a continuous current of galvanism every 48 hours, by means of large clay pads, from the sacrum through the pelvic organs to the anterior abdominal wall and along the spine, is followed often by excellent results. This should be used for 20 minutes, every 48 hours between the menstrual flow, with a tepid salt water bath every second day, followed by thorough shampooing and the use of tonics—strychnine, quinine and iron, and the preparations of malt—regulation of the digestion and defecation.

Where dysmenorrhea is apparently due to a sedentary habit, a lack of exercise and chronic congestion of the pelvic vessels, the regulation of the habits of life is again important—an out-door life, bathing in salt water, regulation of the bowels and the daily use of vaginal injections of hot water, which contract the veins about the vagina and lessen the venous blood in the parts. Here, too, considerable benefit is derived from the application of vaginal tampons of cotton soaked in glycerine, these being repeated every 48 hours and left *in situ* for 36 hours.

Retroversion and retroflexion of the uterus should be corrected. Obstruction to the escape of blood, either at the external or internal os, should be relieved by thorough dilatation under ether with a steel dilator. Salpingitis should be treated by painting the roof of the vagina with compound tincture of iodine twice a week and introducing a tampon of glycerine and cotton, which should be allowed to remain 48 hours. Galvanism, used as before mentioned, is also of value. Dislocation of the ovaries should be corrected by putting the patient in the knee-elbow position and introducing large vaginal tampons until the organs are pushed upward into their proper place, and kept there by the same means, and afterwards retained in position by a properly fitting Hodge pessary.

Membranous dysmenorrhea is best treated by putting the patient under ether, dilating the cervix thoroughly with a steel dilator, and removing very thoroughly with a moderately sharp curette the whole of the mucous membrane from the uterine cavity, and then painting the surface thoroughly with equal parts of carbolic acid and compound tincture of iodine. If this does not effect a cure I would apply the positive pole of a galvanic battery, by means of a platinum sound, to the cavity of the uterus, and the negative pole, by means of a large clay pad, to the surface of the abdomen, and pass a current twice a week of 50 milliamperes for 10 minutes. In a case of hyperplasia, or chronic inflammation of the uterus, where this was apparently the cause of the painful menstruation, I would pursue precisely the same course as in membranous dysmenorrhea.

I have intentionally avoided the discussion of the treatment of dysmenorrhea by means of drugs, for the reason that, excepting for temporary relief, I have seen little or no benefit to be derived from medication. To give temporary relief for severe pain the same general rules apply here as at other times and elsewhere in the body. Opium and its salts, cannabis Indica, and the new products of coal-tar, phenacetine and antipyrin, have proved the most useful, and where necessary should be given in a full dose at the beginning of the pain. Sometimes a full dose of alcoholic stimulant will give the desired relief.

The question of marriage and child-birth, perhaps, should be considered as a curative measure in dysmenorrhea. While it is true that in a considerable number of cases the woman is cured of her painful menstruation as a consequence of giving birth to a child, and it is also true that a certain proportion of cases are much benefitted, both as to their local and general condition as a consequence of the married state, independent of the process of child-bearing, it is in my opinion neither sensible nor wise to prescribe marriage without first making a careful examination of the pelvic organs, and thus enabling us to give an intelligent opinion. No one for a moment would expect that the marriage relations would be anything but unfortunate where there is a prolapsed and tender ovary, or where there is a retroverted and tender uterus.

In conclusion I would say that I doubt not he will best succeed in the treatment of dysmenorrhea who is most thorough and painstaking in his diagnosis, and who does not confine himself, in his management of the case, to some particular drug or some especial plan of treatment; because manifestly no one method can be applicable to an affection due to such a variety of causes.

636 Sutter street.

THE TREATMENT OF PTERYGIUM.

By Wm. Ellery Briggs, M. D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

My excuse for presenting these notes on pterygium is to mention some slight improvements in the method of treating the growth which I think have not yet been generally adopted by the profession.

The name pterygium has been applied to a growth on the eye from its fancied resemblance to the wing of an insect. It is triangular in shape, with the apex impinging upon the cornea and the base in the ocular conjunctiva. It has its origin in the conjunctiva, and when progressive, extends on the cornea towards its centre or in rare cases even beyond this point. Its favorite location is on the nasal side of the eye over the seat of the internal rectus muscle; less frequently it springs from the temporal side, and in rare instances from above or below over the location of the superior or inferior recti muscles. It consists of fibrous and vascular hyperplastic tissue. The conjunctival portion is made up of hypertrophy of the conjunctival and sub-conjunctival tissue, while the corneal extension consists largely of fibrous elements. Numerous enlarged vessels traverse the conjunctival portion.

The primary cause of this condition is some long-continued irritation of the exposed portion of the conjunctiva. The irritation may be kept up by particles of dust, glare, heat, wind, or some chemical irritant causing hyperplasia of the conjunctival and sub-conjunctival tissue. This view of the origin of pterygium has long been accepted and seems to me to be amply proven from the well known fact of its frequent occurrence in hot, dry climates. In California, some of the western States, India and Egypt this trouble is particularly common, while in England, where the air is humid, the light mild and the fields covered with fresh, green vegetation it is rarely seen.

Dr. Theobold proposed the rather fanciful theory that the intimate relationship between the vascular system of the recti muscles and conjunctiva in the neighborhood of the corneal border by influencing the blood supply of the overlying conjunctiva plays a most important role in determining the formation of pterygium. In the light of what I believe to be a fact, that those who are engaged in close work, in doors, and who thus cause most strain upon the internal recti muscles, are rarely affected, while those who are engaged in field-labor and as seamen are the most frequent sufferers, is, I think, conclusive evidence of the falsity of this theory of the origin of the disease.

Many authorities on eye diseases deprecate any operative interference until the growth has extended over the cornea to such a degree as to obstruct vision. My experience leads me to disregard these conservative admonitions, and the more I operate the more convinced have I become that the growth should receive surgical attention before it has affected the sight. I have never seen bad results follow the operation, and even should the growth recur, as it will in a small percentage of the cases in which the injurious influences continue, the patient is in no worse condition than he would have been had nothing been done. As that part of the cornea to which the growth is adherent never regains its normal transparency after excision of the pterygium, it is my invariable practice to operate before it has extended more than half way from the corneal border to its centre. Even before this point is reached it will often be for the best interests of the patient to submit to operation to relieve an unsightly defect and a source of irritation and congestion of the eye. Heretofore the hypertrophied tissue has been excised usually leaving the conjunctival wound to cicatrize, or the apex of the growth has been detached and transplanted to another part of the conjunctiva. It then disappears by absorption. This latter method is still advocated by many ophthalmic surgeons, but I can say nothing of it from experience. The method of leaving the large conjunctival wound after removal of an extensive pterygium I cannot approve, as it may result in a firm and extensive cicatrix which can impair the ocular movements.

The first new feature in the operation that I wish to mention was suggested by Dr. Price in regard to the removal of the corneal portion of the growth. By the usual method of separation with a knife or scissors the cornea is not left as clear as possible, and for this purpose Dr. Price has designed a special hook. The operation is performed as follows: The conjunctival portion of the growth is grasped with the forceps close to the corneal border and separated from the healthy conjunctiva with the scissors. The hook is then introduced beneath the pterygium at that point, and with a careful drawing and twisting movement it is detached from the cornea by a gentle tearing process. The knife or scissors may be required to divide some resisting fibres. The cornea will be found to be much clearer, and all appearances of the operation will disappear much sooner than when the diseased tissues are cut away. A small strabismus hook or the back of a small knife will answer, if the hook designed for this purpose be not at hand. The conjunctival portion of the growth is now removed with the scissors.

The second improvement is in regard to covering the wound after excision. It was described by Dr. C. M. Hobby, and is designed to cover the conjunctival wound with healthy conjunctiva drawn down from beneath the upper lid. This is done by separating the pterygium at its superior margin, then making an incision through the conjunctiva extending upwards from the corneal border. Inferiorly the incision is extended a little below the lower border of the cornea then continued to the base, and the pterygium is carefully dissected off. The upper flap is next carefully separated with a strabismus hook from its sub-conjunctival connection so as to permit its being brought down and united to the lower border without strain. This covers the seat of the pterygium with healthy conjunctiva, and leaves the cicatrix covered by the lower lid and as well protected from irritation as possible.

Following this method of operation I have obtained fairly satisfactory results, and with the least possible danger of recurrence.

429 J street.

A SUCCESSFUL CÆSAREAN SECTION.

By Henry Gibbons, Jr, M. D. Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco.

Read before the San Francisco Obstetrical Society.

Cæsarean section and craniotomy are of rare necessity and occurrence in California. In a practice, largely obstetrical, of twenty-five years' duration in San Francisco, I have seen heretofore, neither in my own practice nor in consultation, any case requiring the former operation, and I have met with but three or four cases in which craniotomy was necessitated. Marked deformity of the pelvis is exceedingly uncommon, hence the case herewith reported had, for me, peculiar interest.

On Christmas day, 1890, I was summoned to meet Dr. W. H. McLaughlin in a case of labor with contracted pelvis. The patient, a primipara, of German birth, 24 years of age, and in vigorous health, had suffered moderate pain for 24 hours. Ten hours prior to my visit the membranes had ruptured, and 5 hours before, the pains had become marked, but not severe. She was not exhausted by labor, but was in good condition. Examination disclosed dwarfed lower extremities, her height when standing being 4 feet 4 inches; also a marked contraction of the superior strait of the pelvis. The external utero-posterior measurement of the pelvis from symphysis pubis to a point on the posterior surface of the sacrum opposite the promontory, was 5¾ inches; and the conjugate diameter of the superior strait, measured with the not very accurate means at hand, 2¼ inches—certainly not more than 2½ inches. A more careful measurement since recovery of the patient shows this contracted diameter to be 2⅜ inches. The cervix was thick and soft; the os dilated to about 1½ inches. The child was in the first position of the vertex—L. O. A.—and was living, although the head was considerably distorted by pressure. Little doubt existed as to the course to be pursued. My views and teaching for years had favored Cæsarean section when the conjugate diameter was less than 2 or 2½ inches, and had been confirmed by the wonderful success in this operation of Sänger, Leopold and others. Dr. McLaughlin concurred with me at once, and I immediately made preparation for the operation, securing as additional assistants Dr. L. L. Dorr and Dr. John Wagner. Meanwhile the husband had been informed of the necessities of the case, and had referred the decision to his wife, who, in apparent anticipation of an operation, at once assented to its performance.

Anesthesia was maintained by ether, a few inhalations of chloroform being occasionally substituted. Dr. Dorr succeeded in keeping the patient in good condition, and there was no nausea or vomiting during or after the operation. Proper antiseptic precautions in regard to the instruments, sponges, hands, etc., were taken ; the bladder was emptied, the hair shaved from the mons veneris, the vagina douched and the abdomen washed with a corrosive sublimate solution. An abdominal incision in the median line quickly exposed the uterus. It was extended to 6 inches in length, and reached an inch above the umbilicus. Dr. Wagner now, and during the remaining steps of the operation, kept the lips of this incision so closely applied to the uterus that no blood or discharge entered the abdominal cavity. To this fact may be attributed, in part, the successful result. The uterine incision was next made. Through a misapprehension it reached higher than was intended, but although the placental site was encroached upon, the entire loss of blood was surprisingly small, amounting to really less than is usually seen in cases of normal labor. The child, weighing over 8 pounds, was now readily extracted, and was given in charge of Dr. McLaughlin. Although still at birth, he shortly succeeded in establishing respiration, and soon the child cried lustily. The placenta separated at once and was removed with the membranes and cord through the incision, the uterus contracting firmly.

The uterine wound was next closed with six silver wire sutures, the wire being inserted so as not to enter the uterine cavity, and the ends being tied, not twisted. I then found the wound to gape over the placental site, where the wall was ¾ of an inch thick. Two catgut sutures closed the gap. The abdominal cavity was now examined and found to contain no blood, whereupon I closed the incision with 7 deep wire sutures passing through the peritoneum, and 2 superficial sutures, supplemented these with straps of rubber adhesive plaster, applied several thicknesses of iodoform gauze over the wound, followed by a layer of borated cotton and several turns of flannel bandage. The patient was then put to bed, her general condition, considering the operation, being excellent. Moderate pain later was relieved by ¼ of a grain of morphine.

I saw the patient daily with Dr. McLaughlin, under whose immediate care she continued, and to whom I am, in part, indebted for the clinical record. On the evening of the third day the temperature rose two degrees and the pulse to 108. Three days later the temperature was normal and the pulse 84. The bowels were moved by enema and black draught, and the stitches were removed on the sixth day. Firm primary union had taken place. From the seventh to the ninth day the temperature reached 101° F.; on the tenth day it became normal, but gradually increased until it reached 103.5° on the fourteenth day, which was greatly discouraging. There was, however, no evidence of peritoneal inflammation, nor had there been pain or chill. One or two doses a day of morphine had been given in the beginning, but was now no longer required. It seemed evident that there was absorption from some purulent collection. A close inspection of the abdominal incision discovered the uterus fixed to the wall, but no tenderness. Somewhat deep fluctuation was detected just below the upper angle of the wound. A short tear had been made in the integument by one of the sutures, and upon raising a small crust covering this a quantity of fetid matter escaped. It was directed that a small poultice be placed over this point for a few hours. In the evening of the same day the wound opened in the line of the incision, near the former opening, and discharged half an ounce of fetid pus. Water dressing was soon substituted for the poultice, the wound speedily closed, the temperature fell rapidly, and by the twentieth day had become normal. The patient, meanwhile, had acquired an excellent appetite, was entirely free from any discomfort, moved about the bed readily, was anxious to get up and delighted at permission to care for her baby.

As before stated, this baby, which was a male, weighed a little over 8 pounds. It proved a vigorous, healthy child. At birth its head was greatly distorted by a large caput extending the entire length of the left side of the head, the parietal bone itself having been partly pressed downward into the narrowed excavation in the effort of the uterus to expel it through the natural channel. The dimensions of the child were: length, 21 inches; bi-parietal diameter $3\frac{10}{16}$ inches; occipito-frontal diameter, $4\frac{7}{16}$ inches; occipito-mental diameter, $5\frac{7}{16}$ inches.

As to the cause of the collections of pus which induced the elevation of temperature, I am in doubt. They were immediately over that part of the uterine incision in which the catgut sutures were placed, and I at first supposed that the catgut had originated the suppuration, which was circumscribed by adhesions of the uterus to the abdominal wall. Dr. McLaughlin reminded me, however, that in applying an abdominal suture at about this point the wire had not included the entire thickness of the wall, but appeared in the wound, between the integument and the peritoneum. In this gap left within the lips of the wound the abscess may have originated. In any event, it was an error not to remove and reapply the suture.

I may be excused for entering so into detail regarding an operation that presented no new features, since it was not only the first of the kind that I had performed, but the first that I had seen. Besides, I was surprised at the facility of its performance, and at the small amount of blood lost. I am convinced that it would have required a greater degree of skill to have delivered by craniotomy without serious injury to the mother. At this date, 3½ months after the operation, the patient is perfectly well, and menstruates regularly. The silver wire sutures in the uterus have given no indication of their presence.

920 Polk street.

MEMORANDA.

A Piece of Wood 6 Inches in Length Impacted in the Rectum.

On June 5th, 1891, a Chinaman 60 years of age, while mining in a ravine about 2½ miles from town, was approached by three men, who demanded his money. They searched him and took from him all he had, about $3 in gold dust, but thinking by torture that they could obtain more money, they sawed off 6 inches from the end of a hoe handle and forced it up the victim's rectum, wholly beyond the sphincter ani, and left him in this condition. This occurred at noon Friday. The following day, by 10 o'clock A. M., he had walked to town and presented himself at my office. After some trouble, with a long pair of forceps I grasped the foreign body, and as the not very carefully sawn end of the handle was downward, it required much force and, I presume, pain to deliver it through a strongly resisting sphincter. From the unprofessional and unscientific manner in which the operators had introduced the handle it had caused some hemorrhage. The Chinaman walked 2½ miles to my office, and walked away apparently suffering but little after the operation. I have not seen him since, but have heard from him, and understand that he got along well and with little suffering. The piece of wood was in the rectum 22 hours.

W. C. JONES, M. D.

Grass Valley, Cal.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

BY WALLACE A. BRIGGS, M. D., Sacramento, Cal. and

HENRY GIBBONS, JR., M. D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Intubation of the Larynx for Diphtheritic Croup.—DR. DILLON BROWN reports a third hundred cases of intubation in his practice during 13 months, with 33 recoveries—males, 48; females, 52. Of the cases, 65 were treated with full doses of bichloride of mercury, with 27.6 per cent. of recoveries, and 35 were treated on the expectant plan or with some preparation of iron, 42.8 per cent. recovering. Food and stimulants were given as largely as possible. Average age, 3 years 6¾ months. In fatal cases the average length of life after intubation was 2 days and 2 hours; in cases of recovery the average time of tube in the larynx was 6 days and 10 hours.—*American Journal of Medical Sciences*, April, 1891.

Treatment of Dysmenorrhea by Electricity.—For many years DR. W. B. SPRAGUE has found the faradic current a better palliative of the severe pain at menstruation than any other remedy. Nearly the full current of a Kidder's battery is used, the positive electrode—broad and flat—over the lumbo-sacral region and the negative—a small electrode—over the hypogastrium. Latterly he has used the constant current to effect permanent cure, and reports cases. When the cause is flexion, stenosis or endometritis, a positive clay electrode is placed over the abdomen, and a metallic sound connected with the negative electrode is introduced into the os. A current of 10 milliamperes is now turned on and the sound soon passes into the cavity of the uterus. The current is continued for 10 or 15 minutes. Since the canal is enlarged by electrolytic action it remains patent, and thus the effect is permanent. A repetition of the process with gradual enlargement of the bulb of the sound is required.—*Annals of Gynecology and Pediatrics*, April, 1891.

Galvanism in the Treatment of Uterine Disease.—DR. JOHN M. FISHER reports the use of positive intrauterine applications of galvanism—60 to 100 milliamperes—with excellent results in the following cases at the Jefferson Medical College Hospital: Persistent hemorrhage following removal of the uterine appendages for septic salpingitis; menorrhagia of 6 years' duration; another of 4 years' duration; uterine fibroids, much reduced in size; menorrhagia and dysmenorrhea; subinvolution and pain, etc. In some cases of dysmenorrhea the application of the negative electrode was found useful.—*Medical and Surgical Reporter*, April 11, 1891.

The Remote Effects of Removal of the Annexæ in Non-neoplastic Affections of the Uterus.—At the French Surgical Congress SPENCER WELLS said he concurred in Battey's opinion that, in America, the abuse of öophorectomy, especially in nervous cases, has become really deplorable. He believes with Battey that neoplasms of the uterus, or of its annexes, often furnish indications for this operation, which non-neoplastic affections rarely do. Öophorectomy, however, may be indicated either by dysmenorrhea or by ovarian neuralgia which has defied all other treatment and threatens either life or reason. In such cases he has witnessed very gratifying results. But it must not be forgotten that, after removal of the ovaries, menstruation may not be arrested; even menorrhagia may occur and suffering may increase and the general health deteriorate. In a certain, as yet indeterminate, ratio of cases hematocele may result or recur. In other cases, the knowledge of their sterility has produced a grave disturbance of the mental balance. He does not share the opinion of certain operators as to the alleged frequency of tubal affections and their incurability without operation. LAWSON TAIT divides his cases somewhat arbitrarily into three classes: Those in which öophrectomy is done: (1) Because either of some uterine lesion or of the symptoms resulting from it. (2) Because of troubles arising from inflammatory diseases of the annexes. [(3) Because of various nervous disturbances dependent on menstruation. The results obtained in the first category are as follows: Of 274 cases of myomata, 6 were immediately fatal, 8 unsatisfactory, and 257 completely cured—that is, either the symptoms ceased completely, and either the tumor disappeared entirely or ceased growing, or the principal symptom of the disease was completely and definitely relieved. Of this series, to his knowledge, but a single case has been sent to an insane asylum, and this one was evidently insane before the operation. In three other cases mania was completely cured by the physical relief afforded by the operation. A number of cases of eccentricity were likewise relieved. Marked non-development of the uterus associated with normal tubes and ovaries sometimes requires removal of the annexes for the relief of the intolerable suffering caused by abortive efforts of the uterus to perform its periodical functions. The results of operation in these cases differ in no wise from those already described. In the second class of cases Mr. Tait has not found time to tabulate his results, and therefore is unable to speak so dogmatically. In this class of cases, however, the underlying conditions are quite different from those of the first class, and the operation itself presents indefinite and indefinable differences of detail. Although often taxing the resources of the surgeon to the utmost, the operation should never be abandoned; contrary to the opinion of many competent surgeons, it may be completed in every case. Mr. Tait is never deterred by fear of rupture, either of the bladder or of the bowel, from breaking up adhesions that may exist between these viscera and an ovary or even a tube. He has seen urinary and intestinal fistulas form and persist for several months, but has always succeeded in finally curing them. Deep, suppurating sinuses may occur in 5 per cent. of the cases and persist indefinitely; at least until treated by what Mr. Tait calls "circular drainage." The results in these cases, especially in the graver ones, are slower than in myomata, for here Tait reopened the abdomen and found new cysts formed about the stump of the Fallopian tube. These he removed. One of the cases died, but in the others relief was complete and immediate. The remote effects of this operation may be obtained in such cases without arrest of menstruation; and in some of Tait's most successful cases the menstrual period has not been influenced in any way. In 4 or 5 per cent. of the cases belonging to the second category recovery may be delayed by an effusion of blood into the folds of the broad ligament. These effusions have always taken place either during menstruation or during a seeming menstrual molimen. In most cases these effusions are small and disappear rapidly. The remote results in this category differ very little from those in the first category, with one exception, and that of sufficient importance to deserve especial mention. In chronic diseases of the annexæ one of the most distressing symptoms is inability to endure marital relations. In most cases requiring surgical intervention such relations have been suspended for a long period, but may generally be resumed within a few months after removal of the appendages. As to the third series, Mr. Tait confesses that he has hitherto observed what seems to him now excessive prudence. Experience in a few well-marked cases of menstrual epilepsy inclines him to a more favorable opinion than he formerly entertained. He reports his first 2 cases. In both the result was brilliant and permanent.—*Gazette des Hôpitaux*, April 4, 1891.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital Sacramento, Cal.,
J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and
G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Nephrectomy for Ruptured Kidney.—DR. OBALINSKI reports (*Sam. klin. Vorträrge*, No. 16, 1891), a case in which he removed a ruptured kidney with good results. The patient, aged 32, fell from his horse on September 21st. The injury was followed by shock and great tenderness and bruising over the right lumbar region, and there was intermittent hematuria. On the 9th day there appeared in the right hypochondrium a circumscribed and fluctuating tumor as large as a child's head. As the tumor increased in size, there was general disturbance, but no symptoms of suppuration. On October 23d the injured kidney was exposed by the lumbar extraperitoneal operation. The organ was found to be completely broken across and surrounded by a sac containing a quantity of pure urine, clear and healthy, with a few blood clots. The ruptured organ was removed—the pedicle and vessels ligatured, and the wound packed with idoform gauze. The patient made a rapid recovery, being completely cured on the 20th. Dr. Obalinski has found reported six other cases of the operation. Three successful, and three fatal.

Resection of the Gangrenous Bowel in Cases of Hernia.—DR. F. KRUMM (*Centralblatt f. Chirurgie*, No. 14, 1891), after putting the question whether primary resection of the bowel should be done in these cases, concludes that statistics show better results from removal of the gangrenous portion and careful stitching, than from the formation of an artificial anus. At the same time he is of the opinion that this step can never completely replace the older operation. He draws his conclusions from the practice in the clinic of Prof. Czerny of Heidelberg.

Treatment of Tuberculous Hydrocele.—M. BRUNER recommends (*Centralblatt f. Chirurgie*, No. 14, 1891)) the injection of a 50 per cent. carbolic acid solution with a hypodermic syringe.

Pistol-shot Wounds of the Skull.—DR. E. H. BRADFORD sums up a paper in which he advocates trephining and searching for the bullet in gun-shot wounds of the cranium as follows: In penetrating pistol-shot wounds of the skull death is to be anticipated in a large majority of cases. Recovery, however, does occur in a certain number of instances. The treatment should be the treatment of a penetrating fracture of the skull. The scalp should be dissected away from the injury, and the bone thoroughly examined. Loose fragments of bone should be removed. A trephine should be used if it is considered necessary thoroughly to cleanse the wound or to give egress to any collection of fluid or blood that may be below the dura. If the dura is penetrated, and if there be any bulging, the dural opening should be enlarged. The brain substance should be thoroughly irrigated, but not probed or treated with violence. It is unnecessary to state that the strictest asepsis is desirable.—*Boston Medical and Surgical Journal.*

Excision of the Entire Tongue.—In reporting a series of 100 cases of this operation (*British Medical Journal*, May 2, 1891), MR. WALTER WHITEHEAD gives the following important details: For an anesthetic, chloroform is recommended. The important point is to obtain deep anesthesia before commencing the operation. The mouth is kept wide open by an effective gag. The aim should be to place the jaw, as it were, in the position it occupies in semi-luxation forwards. The patient's mouth should be, roughly speaking, on a level with the surgeon's axilla, the head firmly held erect, with a slight inclination forwards, so the light will fall well into the mouth. The persistent tendency of the patient to slip down on the operating table is best prevented by having him recline on an almost perpendicular back-rest, with the thighs bent at right angles over the elevated central portion of an operating table. A ligature passed through the anterior portion of the tongue is a great aid throughout the operation and enables the assistant to make tense those tissues which are immediately to be divided. The first step is the separation of the tongue from its attachment to the floor of the mouth and the anterior pillars of the fauces. If these are completely divided, the tongue may be drawn freely from the mouth, thus converting the operation into an extra-oral excision. The incisions are made boldly, regardless of bleeding, until close to the vicinity of the main arteries; the more profuse the general oozing the more rapid the procedure; the object being to get as quickly as possible to the main arteries, as all hemorrhage will cease immediately after their division. The lingual arteries are practically found invariably in the same situation, very little experience being required to seize them with forceps. After the vessels are effectually twisted, the rest of the tongue may be removed without anxiety as to hemorrhage. A loop of silk is passed through the glosso-epiglottidean folds as a provisional means of security. This may be removed at the end of 24 hours. The treatment of the floor of the mouth after the tongue has been removed is to make the cut tissues as far as possible aseptic. This is done by swabbing the parts with a mercurial solution, and after drying, finally painting them with an iodoform styptic varnish. This enables the patient to take food in the ordinary manner almost immediately after the operation. Liquid food is given freely and as early as possible. The patients are made to sit up from the first, and in fine weather to walk out, if there be sunshine, the day after the operation. No evil consequences have been observed and great advantage follows this plan. The average time of convalescence is about 7 days.

Radical Cure of Hernia.—HAIDENTHALLER gives some statistics of the results of operations for the radical cure of hernia in Billroth's practice. The cases number 136 of inguinal, femoral and umbilical rupture, in both sexes. In 93 cases an operation had been performed, whilst in 5 instances the patients were treated by injecting alcohol into the sac. The method employed was Czerny's, and consisted in ligaturing the neck of the sac and removing it, and uniting the deep and superficial parts of the wound with silk sutures. The mortality in the non-strangulated cases was between 6 and 7 per cent., and the causes of death, when it occurred, were entirely of septic origin. As to the final results, they were true cases of radical cure, though occasionally the hernia returned, in one instance 6 years after the first operation, and in 3 cases after a lapse of 5 years. The cases of alcoholic injection seemed to yield excellent results at first, but they were not permanent. Stout silk ligatures seem to hold the edges of the wound longer in apposition, hence the success which it appears to yield.—*British Medical Journal*, January 10, 1891.

Cases of Hernia which have Relapsed after Various Operations for Radical Cure.—In an article on this subject WM. T. BULL says, in 73 cases which came under his observation the average age was from 38 to 44. Duration of treatment was nearly the same in all methods. On an average, recurrence takes place in 15 months. They have recurred as late as 3 years and 4 months. There have been no patients so far heard of who have been more than 5 years without relapse. Striking cases of immunity from relapse have occurred in irreducible, or strangulated hernia, where no attempt at a radical cure was made. The average age of 18 such cases was 45 years. Fifteen of these patients wore trusses from the time of operation. In several cases the hernia was out of sight until the truss was discontinued or broken. Patients who have worn no truss have the largest and most voluminous protrusions. Cicatrices which result after suppuration and healing by granulation have less vitality than those resulting from prompt primary union. The pressure of a truss without and the viscera within causes them to soften and yield. Relapsed cases sometimes show a yielding at the site of the external or internal ring, or there may be a bulging of the whole line of the inguinal canal with protrusion. In cases operated on by the open method the orifice is not unlike that of a ventral hernia—an opening in the wall without any canal, the hernia protruding directly forward. The peristaltic movement of the intestines may be seen through such a covering. The adhesions of the omentum to such a cicatrix makes all efforts at coughing or straining painful, while a truss is almost intolerable. From 3 to 6 months after operation the cicatrix is firm, dense and contracted; later it begins to yield in places along its line. In relapsed hernia the protrusions are not so large and patients wear a truss with more comfort and security. Patients who complain of being worse after the operation have not worn a truss, or the cicatrix presents signs of having healed by granulation, with subsequent yielding. The best plan is that which shows the smallest number of relapses in the longest period of observation. Such a period should be at least 5 years. Prompt healing of the wound and support of a truss should be insisted on after the patient leaves his bed.—*New York Medical Journal*, May 30, 1891.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M. D., Sacramento, Cal.

Medicated Intraocular Injections.—M. ABADIE injected 1 drop doses of a 1:1000 sublimate solution into an eye affected with rebellious syphilis with most gratifying results. We know how helpless we are in cases of hemorrhagic glaucoma in which neither sclerotomy nor iridectomy give relief, and where the pain is so intense as to threaten the necessity of enucleation. M. Abadie has succeeded several times in calming the pain and saving the eye by injecting a drop of ergotine into the vitreous. He also obtained good results from the injection of the same remedy in an eye affected by hydrophthalmia, in which there was evidence of intraocular hemorrhage. He mentions the favorable results obtained from sublimate injections in certain cases of septic infection of the cornea, and in severe forms of macular retino-choroiditis. He thinks the intraocular injections should be followed for some time with subcutaneous injections of sublimate with a view of preventing recurrence of the trouble. M. DARIER employs subconjunctival sublimate injections in various ocular troubles supposed to be infectious. Grave forms of specific iritis and cases of gumma of the iris recover much more quickly with this method than under the usual treatment. This is also true of corneal affections of similar origin, as well as certain acute forms of iritis, in which it is impossible to be certain of the specific nature. Subconjunctival injections are indicated in all cases where it is necessary to reach the trouble in the shortest possible time. No other plan of medication gives such prompt result. A perfectly aseptic solution and syringe must be used. A dose of $\frac{1}{20}$ milligramme at each injection every three days should be given four or five times. It is well to combine the subconjunctival injections with subcutaneous treatment when mercury is indicated. DE WECKER opposes the practice of injecting into the vitreous. In a severe case of syphilitic retino-choroiditis one drop of 1:1000 of sublimate solution had resulted very unfavorably.—*Union Médical*, May 14, 1891.

Pathology of Conjunctival Affections from a Bacteriological View. M. CHIBRET has made a study of the general and of the microbic causes of conjunctivitis. The conjunctiva presents the conditions (heat, moisture and mild alkalinity) favorable to the propagation of many bacteria. All observers have found the conjunctiva a rich field for bacteria, but in spite of the presence of numerous pathological germs, particularly the staphylococcus aureus pyogenes, the conjunctiva remains healthy unless the epithelium, which acts as a barrier to their penetration, has been broken. When it has been abraded the door is opened to infection. Such lesions may be caused by various agents. (*a*) Exogenous: physical irritants, dust and sudden changes from cold to heat, and the reverse, and chemical irritants, among which we may probably include the secretions of certain microbes which have the power of attacking the healthy conjunctiva. The virus of trachoma, on the contrary, it seems cannot penetrate through an epithelial abrasion which it cannot produce. It is a noticeable fact that dust from certain substances, for instance that of cotton and linen factories, predispose to conjunctivitis or trachoma, while that of carbon from coal mines does not have the same action. A simple catarrh, a conjunctival blenorrhea may open the way for trachoma. As Gunning has stated trachoma varies in frequency in proportion to the frequency of general affections of the conjunctiva. (*b*) Endogenous: The endogenous causes of conjunctival infection are impetiginous and eczematous affections of that membrane which are so common in infancy. Finally, outside of the local lesions, the state of the general health certainly plays an important part in the receptivity and virulence of the local disease. Crede's method demonstrates that ophthalmia neonatorum can be almost completely prevented by sterilizing the conjunctival surface so that the virulence of the gonococci is destroyed. The receptivity of the membrane may be influenced by individual peculiarities, by race and by the age of the person. The peculiar receptivity of the new-born to ophthalmia neonatorum compared with the adult shows an anatomical cause. The conjunctival epithelium does not oppose a barrier against the physico-chemical action and the resultant infection. The study of the microbe is further advanced than the conditions for its development.—*Union Médical*, May 21, 1891.

The Treatment of Toxic Amblyopias.—DR. CHALTIN summarizes the treatment of these condition as follows: (1) Alcoholic amblyopia. Prompt and total abstinence from alcoholic drinks. Improve nutrition with tonics and proper food, quiet the excited cerebral symptoms with bromides. Locally—pilocarpine is instilled if mydriasis exists. Strychnine injections, the constant current, the ocular douche and frequent bathing are to be used. (2) Nicotine amblyopia. Moderate use of tobacco; to smoke no more than two-thirds of a cigar, the other third being a reservoir for the nicotine. If amblyopia already exists prohibit tobacco altogether. Improve nutrition. Give inhalations of nitrite of amyl, subcutaneous injections of strychnine, the constant current and ocular douche. (3) Saturnine amblyopia. Treatment of the constitutional poisoning by sulphur baths, iodide of potassium, purgatives and tonic regime. (4) Quinine amblyopia. Purgatives and diuretics, inhalations of nitrate of amyl, injections of strychnine and electricity. (5) Antipyrine amblyopia. The author cited several cases of amblyopia from excessive doses of antipyrine. Abstinence from the drug is sufficient to relieve the condition.—*Révue de Therapeutique—Union Médical*, May 2, 1891.

The Treatment of an Acute Attack of Hay Fever.—DR. ISIDORE GLUCK recommends the sulphate of atropine locally in the treatment of hay fever. It depresses the glandular activity and thus lessens the secretion, which, being of an irritating character, causes violent paroxysmal sneezing and other reflex phenomena often associated with hay fever. He applies it by dipping a piece of absorbent cotton, attached to a cotton holder, into a solution of cocain-phenol, and applies it to the engorged parts. After some contraction and a moderate amount of anesthesia has been produced he applies a 1 per cent. solution of sulphate of atropine in the same manner. Internally small doses of aconitine were given every hour or two, according to the severity of the case. The next day the patient was invariably better. The treatment was continued until recovery. In addition to the local treatment, he generally prescribed tonics containing phosphate of iron and quinine.—*Medical Record*, May 10, 1891.

SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

AND

DERMATOLOGY.

By D. W. MONTGOMERY, M. D., Professor of Pathology, University of California, San Francisco.

Specific Disease of the Intestines in Acquired Syphilis.—In 11 cases of such lesions RIEDER has noted: (1) The seat of the lesions is in the small intestine, and especially in its upper section. (2) Arranged in pairs or in groups. (3) The lesions tend to form a ring within the lumen of the canal, the *plaques* of the disease strongly marked; the surrounding tissues are swollen, causing increased thickening of the intestinal walls, and especially an increase in the muscle layer. (4) The results often produce a stenosis and later atrophy of the intestinal walls. The histological structure shows in the early stage an increase in connective tissue, at first in the submucosa, later in all the coats of the intestine.—*Centralblatt f. klin. Medicin*, No. 19, 1891.

Comparative Frequency of Organic Stricture of the Urethra in the White and Colored Races.—DR. W. PAGE MCINTOSH, who, as a surgeon in the Marine Hospital service, has served several years in southern cities, has collated cases of gonorrhea occurring in both races, and the frequency of resulting stricture. His conclusions are interesting in that they show stricture in the white race to be three times as frequent as in the negro, the acute gonorrhea being equally violent in both races. In summing up he says: The negro is more liable to contract gonorrhea, but is much less liable to get stricture as a result; there is about 1 stricture to 20 gonorrheas. The proportion of strictures to gonorrheas in whites is 1 to 6. Gonorrhea occurs about once in 20 cases of sickness in white men, and about once in 5 cases of sickness among negro males.—*New York Medical Jou1nal*, May 16, 1891.

Pulmonary Syphilis in the Adult.—DR. SATTERTHWAITE, at a recent meeting of the New York Academy of Medicine, said that the occurrence of pulmonary syphilis, unmixed with tuberculosis of the lungs, has long been a question in dispute, and as Dr. Welch, of Johns Hopkins points out, it will be, until the true germ of syphilis is definitely and conclusively settled. Dr. Satterthwaite records six autopsies in which the existence of pulmonary syphilis was beyond doubt. To diagnose this affection is exceedingly difficult owing to the close resemblance of its clinical manifestations to tuberculosis, broncho-pneumonia, and bronchitis. One of the peculiarities of syphilitic pneumonitis being that while the physical signs are well marked, the constitutional symptoms are exceedingly light, the temperature being but slightly raised, and the appetite and strength fairly good. Another feature in the diagnosis is the relief afforded by anti-syphilitic remedies. In the discussion following, DR. R. W. TAYLOR reported four cases in which the diagnosis was made clinically; in three the pulmonary signs disappeared under syrup of the iodide of iron and a mixed specific treatment. DR. L. WEBER reported two cases of syphilitic disease of the bronchi.—*Boston Medical and Surgical Journal*, June 11, 1891.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

The Excretion of Iron Salts After Injection Into the Blood.—JACOBI has furnished some additional facts regarding the disposal of iron salts after their injection into the circulation of dogs and rabbits. To demonstrate his experiments he used a double salt of iron, which does not coagulate albumin, and injected solutions of it directly into the vessels. Hamburger had previously claimed that iron salts given by the mouth are not absorbed, because he recovered the greater part of the iron from the feces and only the merest trace from the urine. Jacobi, however, remarks that this is not conclusive, because the iron might be absorbed from the intestine and then excreted back again into the intestine. He concludes that iron injected into the blood is disposed of in the following manner: About 10 per cent. is excreted by the bowel, liver and kidneys together; 50 per cent. is deposited in the liver; and the remainder is deposited in the spleen, intestinal walls, kidneys and other organs.—*British Medical Journal*, April 25, 1891.

Effect of Certain Drugs on the Renal Circulation.—DR. ALBANESE has published an account of some researches on the effects of caffein, chloral and curare on the renal circulation, by which he has been led to the conclusion that the amount of urine secreted is not directly proportional to the quantity of blood passing through the organ. When chloral alone was given there was a very marked increase in the volume of the kidney, though, as is well known, this drug has an exceedingly light diuretic action, while curare, which has a well marked diuretic action, was shown to cause no perceptible increase in the volume. When caffein was introduced into an animal already under the influence of either chloral or curare, it immediately caused a decided increase in the size of the kidney, and at the same time induced marked diuresis. Nevertheless, the increase in size produced under these conditions was not enough to account for the large quantity of urine secreted. Dr. Albanese does not agree with Schroeder that caffein contracts the renal vessels, but finds that its action is first to increase slightly the volume of the organ and then to cause a slight dilatation of the vessels. As there appears to be no indication that the diuretic action of drugs is due to increase in circulation or in volume, he is inclined to refer it to some change effected in the renal epithelium.—*Lancet*, April 11, 1891.

The Effects of Strychnine on the Stomach.—The effect of nitrate of strychnine on the functional activity of the stomach has been investigated by DR. GAMPER. He found that strychnine increased the amount of gastric juice secreted, the general acidity, and the quantity of free acid in the secretion. It also restored the absorption from the stomach, and strengthened the mechanical movements. Its effect continued for some time after its administration had been stopped. Dr. Gamper declares strychnine to be the most effective of all drugs in the treatment of chronic alcoholism.—*Lancet*, April 18, 1891.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

The Treatment of Chronic Constipation.—DR. T. FLOTAU recommends for this purpose the direct application to the rectal mucosa of about 3 grammes of powdered boric acid. In cases where the mucosa cannot be reached, insufflation of the same quantity of powder is employed. In from ½ to 3 hours after the application peristalsis occurs attended with copious fecal evacuations. The evacuations may occur 2 or 3 times during the day and are never painful. This method never fails in properly selected cases. Experiments made with other remedies yielded negative results. There is no fear of intoxication, as indicated by a large number of cases treated. In three cases failing to yield to other remedies boric acid accomplished the desired result.—*Berlin. klin. Wochenschr.* March 2, 1891.

The Transmission of Tuberculosis by Cow's Milk.—OLLIVIER reports the case of a lady, 21 years old, previously healthy and of healthy parentage, who developed on the 14th of December meningeal symptoms and died on the 25th of the same month from tubercular meningitis. This lady was educated at a boarding school where, in a limited period, 11 other pupils contracted tuberculosis. An investigation showed that the milk supplied to the school was obtained from a cow which died of tuberculosis. OLLIVIER believes that the transmission of tuberculosis by food is more frequent than is commonly supposed, and concludes that only milk which has been boiled should be ingested.—*Wiener med. Presse*, March 15, 1891.

Iodide of Potash in the Diagnosis of Pulmonary Tuberculosis.—GEVRY STRICKER (*Centralblatt f. klin. Medicin*) directs attention to the diagnosis of apical lung affections when dulness or modified respiration is present without rales. The latter are artificially produced by the administration of small doses of iodide of potash (about 0.2 gm. a day). The auscultatory phenomena of pleuritic adhesions are similarly modified. The iodide increases the secretions of the air passages and renders the physical symptoms of dulness and pleuritic adhesions more manifest. Stricker believes that the secretions are particularly excited in the affected parts of the lungs. He has succeeded when the cough was dry, without sputa, in producing the latter with iodide of potash, and demonstrating in the secretions the bacilli of tuberculosis.—*Berliner klin. Wochenschrift*, March 23, 1891.

The Prophylaxis of Phthisis.—ROEMPLER, of Görbersdorf, delivered an address on this subject before the recent Balneological Congress in Berlin. Prophylaxis is accomplished in 2 ways: (1) Strict observance of the prophylactic measures recommended by Cornet; (2) Increasing the resistance of the hereditarily disposed or already diseased organism. The obligatory regulations adopted by Prussia are commendable. Handkerchiefs used for receiving the sputa must be burned. We have remedies which are effective against the bacilli even after they have entered the organism. The action of the bacilli is different in the healthy and in the diseased organism. Just the same as the susceptibility to tuberculosis is different in animals of the same species, so it is with man. All children of tuberculous parents need not necessarily die of phthisis, but they more readily become victims to infection than the children of healthy parents. The anemia of hereditarily disposed children must be energetically treated. The sooner such children are brought under hygienic control the less will be the mortality. The observation has recently been made that the bacteria in the blood of living rabbits multiply more rapidly when the animals are placed in a cold chamber than when brought under the influence of increased temperature. The country laborer who is constantly at work in the open air rarely becomes a victim to consumption. The laws of hygiene are the only effectual weapons in securing immunity from phthisis and preventing its spread.—*Wiener med. Presse*, March 15, 1891.

A New Method for Determining the Lower Border of the Liver.—C. VERSTRAELEN (*Centralblatt f. klin. Med.*) determines the lower border of the liver by auscultation. If the patient is auscultated in the sitting, or better still, in the recumbent posture, with relaxed abdominal muscles, beginning at the apex beat and then following the different lines of the thorax, it will be found that the intensity of the cardiac tones is well preserved over the entire hepatic region; at the lower liver border, however, the tones are suddenly lost, and even after careful examination they are no longer heard. In this way the lower border of the liver is determined. This method loses much of its practical value in those cases where the heart tones are weak. The author lays particular stress on having the abdominal walls relaxed, otherwise they will conduct the heart tones. —*Wiener med. Presse*, March 22, 1891. [The demarcation of the lower border of the liver by percussion is very difficult, if not often impossible, in the epigastric region, owing to the relative thickness of the abdominal parietes and the thinness of the liver border. I have tried this method in a number of cases, under the most favorable conditions, and can only speak of it as very unreliable. I have adopted the following method of determining the lower liver border by linear percussion: The patient is first placed in a position best adapted to approximate the liver to the abdominal wall. This is accomplished by the knee-elbow position, or if this is impossible, by the erect position, the body being inclined forwards. The edge of a coin (preferably a dollar) is then deeply imbedded in the abdominal walls and the free edge of the coin is lightly percussed until a dulness is obtained. If this dulness represents the liver border, then, in accordance with the fact that the liver undergoes respiratory dislocation, the line of dulness will be lower during inspiration and higher during the act of expiration.—A. A.]

Diabetes.—RENDU classifies the following affections characterized by sugar in the urine: (1) Temporary Glycosuria; caused by over-exertion, especially cerebral. It is also encountered in acute diseases, or after poisoning by various substances, such as coal gas. It is not a true diabetes, and is produced by congestion of the floor of the fourth ventricle. (2) Diabetes of Nervous Origin. This corresponds to the glycosuria produced by puncture of the floor of the fourth ventricle. LUYS has found, at autopsies of diabetics, a pronounced congestion of the floor of the fourth ventricle. (3) Constitutional Diabetes. This is of two varieties—gouty, or *diabète gras*, and pancreatic, or *diabète maigre*. The first is found in those who are gouty, either by inheritance or by acquired taint. It may last for years without affecting the health, and alternates or occurs with other gouty symptoms (eczema, migraine epistaxis). Thirst may be absent. The disease may be revealed by other symptoms, such as furuncles, insomnia, or pruritus of the genitalia. The quantity of urine is not above 5 litres; there is no emaciation. The quantity of sugar excreted is quickly modified by treatment. (4) Pancreatic Diabetes. In this form there is no diathesis or predisposition; without apparent cause the patient suddenly becomes diabetic. The symptoms of invasion may be polydipsia, intestinal disturbances, paroxysmal diarrhea, and chronic enteritis with rapid enfeeblement. Fatty stools, vertigo, somnolence or insomnia may be present. Premature and absolute impotence should make us think of pancreatic diabetes, unless the patient has general paresis or ataxia. The lesions of the pancreas are various, but they all end in its destruction. Atrophy or sclerosis may be present; the size of the organ may be normal, but the glandular structure altered or destroyed. Closure of the excreting canals has been caused by calculi, tumors or abscess. Ablation of the pancreas in the dog produces true diabetes with polyuria, glycosuria and emaciation. All pathological observations are not in accord with this. BAR and PICQ have reported 7 cases of cancer of the pancreas without glycosuria; while BOUMAINE has reported cases of *diabète gras* with pancreatic lesions. REMOND removed the pancreas without causing diabetes. LÈPINE and HÈDON maintain that if the pancreas is completely removed glycosuria results; if a portion remains, glycosuria may be absent. While some pathological relation exists between the pancreas and diabetes, it is not thoroughly understood. Polyuria and glycosuria are more frequent after changes in the pancreas than after puncture of the floor of the fourth ventricle.—*Semaine Médicale*, March 28, 1891.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

Fragility of Bones in Chronic Diseases of the Central Nervous System.—DR. KONSTANTINOVSKY has lately written an article on this subject. The materials for study were derived from autopsies held on the bodies of patients, who had suffered from insanity for varying periods. Twelve had had progressive general paralysis; 4, dementia of various forms; 2, had been imbecile; 4, had acute or chronic forms of paranoia; 1, a brain tumor; 1, spinal myelitis, and 2, endocarditis and tuberculosis. The chemical constitution of the ribs, the degree of their brittleness, the macroscopical peculiarities and histological characteristics were all inquired into. In summing up the result of his work, the writer found that in chronic diseases of the nervous system, especially in insanity, the ribs were apt to undergo morbid changes, giving rise to increased brittleness, and hence the predisposition to fracture from the slightest violence. In the same line of study, the history of a case of mania, followed by hyperesthesia and osteomalacia, is reported by DR. J. C. HOWDEN, (*Glasgow Medical Journal*), in which the *post-mortem* examination revealed softening of all the bones in the body, with the exception of those of the skull. Although in the course of the disease the pain and hyperesthesia had been remarkable, the existence of mollities-ossium had never been detected during life, as the patient had been constantly in bed.—*Journal of Nervous and Mental Diseases*, January, 1891.

Aprosexia Nasalis.—Nasal obstruction occasionally renders mental activity irksome. GUYE, of Amsterdam, in 1887, first directed attention to disturbances of the cerebral functions following obstructions of the nose. Since then similar observations have been noted, especially in boys. SEIFERT has observed 7 cases of aprosexia nasalis during the last 2 years, in boys between the ages of 12 and 17 years. In all the cases there were disturbances of the cerebral functions, manifested by weakened memory and inability to concentrate the attention on any given object. Treatment of the nasal or retro-nasal affection was rapidly followed by cures. Seifert recommends family physicians to search for nasal affections in all children showing retarded mental development.—*Münchener med. Wochenschrift*, January, 1891.

Nicotine Psychosis.—According to DR. SCHROFF, the primary effect of tobacco upon the system, is excitation, the secondary, depression. It affects the entire muscular system, the heart as well as the vasomotor system. The disease called nicotinosis mentalis is a primary insanity, having a regular course and characteristic symptoms. Among the latter are: a feeling of extreme debility and impotence, with early hallucinations, delusions and suicidal tendencies. The patient at first feels ill, is restless, easily excited, sleepless, indifferent to usual occupations and more or less depressed; afterwards hallucinations of sight, hearing and of general sensation set in with much palpitation and pain about the heart. Later in the course of the disease the hallucinations become more exaggerated; he has visions of angels, heaven and hell, is excitable and boisterous. The paroxysms of excitement are periodical, lasting two weeks or more, with intervals of quiet. In the beginning of the disease the patient is gloomy and restless; later on, and as it becomes chronic, he is more quiet and feeble-minded. Patients sometimes recover in the early stages, but never in the later ones. DR. KJELLBERG, of Upsala, has investigated the effects of tobacco in inveterate smokers and finds that they are of a distinctly injurious character. Nicotinosis mentalis is a primary disease which belongs to the group of mental intoxications. DR. KJELLBERG also speaks of a preliminary stage, lasting about three months, which is characterized by general malaise, uneasiness, insomnia, depression often of a religious tendency. He divides the established disease into three stages: (1) The patient is subject to hallucinations, fixed ideas, with tendency to suicide, depression, attacks of fear and outbursts of anger. He talks little, but logically; the nutrition is impaired. (2) Exaltation of a pleasant type is present, followed after two or three weeks by depression which, in its turn, is succeeded by a slight maniacal condition. (3) The intervals between the attacks are shorter, the patient very restless and the intellect and memory impaired. He observes what is going on, but is taciturn and indifferent. The prognosis is good before the third stage, but after that unfavorable. The treatment consists mainly in abstinence from the use of tobacco, with nutritious diet.—*Wiener med. Presse—Medical Age.*

Treatment of Delirium Tremens.—At a recent meeting of the Society of German Naturalists and Physicians, DR. AUFRECHT delivered an address on this subject, particularly with regard to the questions whether there is any specific remedy for this disease, and whether alcohol should be administered during the treatment. The author stated that he had never seen any favorable effects from the employment of opium or morphine; that he now only employed chloral hydrate, which on the evening of the first day he gives in a dose of 60 grains in a mixture of simple syrup and syrup of orange-peel. This remedy he has usually found capable of producing sleep. He repeats the dose on the evening of the second and third day, and it may frequently be necessary to give an additional dose of 30 grains on the morning of the second and even on several subsequent days. Under no condition does he ever administer alcohol. From 1880 to 1890 he has treated 290 different patients, and of these only 10 died. Most of those which proved fatal had received morphine, while of the last 124, which he treated with chloral only, none proved fatal. The average duration of time during which the patients remained in the hospital was a little over two weeks. In the discussion which the reading of this paper evoked, DR. THOELE stated that he had unpleasant associations with chloral, and now neither gave it nor alcohol. He had, for some time, employed hot baths of 15 minutes' duration, followed by a cold douche, and had noted that on the third night of this treatment sleep always ensued. PROF. JURGENSON, on the other hand, had employed even larger doses of chloral than recommended by Aufrecht, and had never seen any bad effects. He referred to one patient, who was in the habit of taking daily nearly two quarts of absolute alcohol and to whom he gave from 120 to 465 grains of chloral in 24 hours. He also stated that he does not entirely stop the use of alcohol, which he administers in the form of cognac, in order to avert the threatened paralysis. He never gives morphine, but sometimes gives hydrochloric acid in addition to the chloral.—*Weiner med. Blätter.*—*Therapeutic Gazette*, November 15, 1890.

Influence of Pyrexia on Insanity.—In a paper upon the favorable influence of pyrexial disorders upon mental disease, DR. WILLERDING reports a case of acute mania in which recovery followed upon an attack of pleurisy. The appearance of an epidemic in the asylum is hailed with satisfaction by certain physicians, who advise that acute fever should be artificially produced in the insane. Some have not even hesitated to inoculate matter capable of generating the required disturbance. It has been proposed by Koster to erect asylums in places where ague is prevalent, since good results have followed the accidental exposure of the insane to malaria; thus, out of 24 patients attacked, 7 regained their sanity and 7 others showed great improvement. Other infectious diseases are even more potent in their beneficial effects than malaria—as typhus, variola, erysipelas, pneumonia and diphtheria. Dr. Wellerding's case was one of acute mania following an attack of typhus abdominalis. The maniacal symptoms disappeared in the course of pleurisy attended by considerable fever. They did not reappear on the subsidence of the latter disorder. The patient was discharged cured.—*Allgem. Zeitschr. f. Psych.*—*American Journal of Insanity.*

Ligature of the Vertebral Artery in Epilepsy.—DR. TELFORD SMITH reports the following case: A congenitally imbecile boy, aged 11 years, had from birth on, from 20 to 30 epileptic fits a month. In 1881 an attempt was made to benefit the disease by ligating the left vertebral artery. Four years after this operation there was marked mental improvement, after carful training, and there were no more epileptic attacks. They gradually returned, however, and the mental condition relapsed. In 1885, he had 49 fits; in 1888, 231 fits; in 1889, 245 fits, and the mental state was, at the time of the report, slowly deteriorating.—*Journal of Mental Science*—*American Practitioner and News*, January 17, 1891.

The Virile Reflex.—DR. C. H. HUGHES refers to a new diagnostic reflex present in all healthy men whom he has examined. The individual is placed in a supine horizontal position, the skin of the penis is then made tense by grasping the prepuce near the frenum with the left thumb and index finger, and drawing it firmly toward the umbilicus, the remaining digits of that hand being placed low down on the dorsum of the organ for perceptive purposes. If now the side or back of the penis near the perineal extremity is quickly percussed, a quick and very perceptible retraction of the bulbo-cavernous portion is noted. The "penis percussion reflex" is feeble or absent in children under the age of puberty; it becomes impaired or abolished after prolonged excessive venery. It is not impaired in masturbation when the habit has not destroyed the sexual power, but excessive onanism long continued and accompanied by neurasthenia diminishes the reflex. In old men who have lost virility the sign is absent.—*Alienist and Neurologist*, January, 1891.

Loss of Consciousness in Epilepsy.—BROWN-SEQUARD has lately made the assertion that cerebral anemia is not the cause of the loss of consciousness in epilepsy as in natural sleep; but that the cessation of the activity of the brain in hypnotic as well as in normal sleep, in *petit mal* as in well developed epileptic convulsions, in certain cases of syncope, in asphyxia and in poisoning, depends upon an inhibitory action upon the base of the encephalon and cervical portion of the cord, the quantity of blood within the brain remaining the same. He has demonstrated this inhibitory action by several experiments upon dogs and other mammals. The mere section of the skin of the neck, which it is necessary to make in order to expose the great sympathetic and its ganglia, being followed by an inhibition of the epileptogenous power of the brain, whilst ablation of the two superior cervical ganglia is followed by the same inhibitory action, the quantity of blood in the brain remaining normal.—*Archives de Physiologie—Medical News*, January 24, 1891.

Peculiar Action of General Massage of the Body.—BARON BUSCHMANN reports some observations made in two cases of morphinism, where massage treatment not only seemed to improve the general condition of the patients, but also diminished the craving for the hypodermic injection, the massage almost acting as a substitute for the morphine. He also observed that massage applied immediately after a hypodermic injection increased the action of the alkaloid and therefore thinks that the same effect may be obtained from a diminished quantity of morphine if immediately followed by a general massage of the body.—*Wiener med. Presse—Centralblatt f. klin. Medicin.*

Report of Cases of Alcoholism.—DR. LATIMER, who has charge of the Baltimore City Jail, reports that he has treated 958 cases of alcoholism during the period from April 11 to December 31, 1890, of which 40 suffered from acute excitement or *mania a potu*. The average duration of the mania in each case was 48 hours. All of these patients were admitted drunk; most of them had had previous attacks of delirium tremens and many were also addicted to the use of chloral and opium. Nearly all of the total number had tremor, pains in the head and muscles, loss of appetite and frequently vomiting. As to treatment he would say that no stimulants were given in any case. The uniform prescription was 30 grs. of potassium bromide every two hours in maniacal cases and every three or four hours in other cases. One-fourth grain of sulphate of morphine was occasionally given hypodermically at bed time in cases of noisy mania. There were no fatal cases. All recovered without administration of stimulants, and though the food was imperfectly adapted to their needs; which facts, he thought, rather indicated that alcoholism was not due to a suspension of stimulants nor to the indisposition to take stimulants. Dr. Latimer was of the opinion that many cases of delirium tremens had a fatal issue in consequence of the administration of stimulants.—*Times and Register*, March 28, 1891.

Anomalies of Brain and Skull in Criminals.—PROFESSOR M. BENEDIKT has published some results of his examination of the brain and skull of Hugo Schenk, a notorious murderer of women. The brain presented a number of variations from the normal. In each hemisphere the internal sulcus parieto-occipitalis entered the sulcus calcarinus as an irregular lateral offset, instead of forming a common stem with it. The sulcus occipito-temporalis (called limbic fissure by the author), which separates the gyrus hippocampi from the temporal convolutions, communicated with the sulcus calcarinus instead of being separated from the latter by the gyrus linguæformis. The gyrus hippocampi was found atrophied, a condition frequently observed in epileptics, and was separated from the gyrus linguæformis by a fissure, instead of being joined by a wide bridge, a relationship entirely opposed to the type of gyrencephalous animals and of normal man; it always points to a great disturbance in the balance of the constructive force. The confluence of the sulcus calcarinus with the sulcus occipito-temporalis must also be regarded as a stigma of high grade. Of the various convolutions of the right hemisphere the gyrus precentralis and gyrus angularis were the best developed. The left hemisphere showed arrested growth of the frontal lobe with high development of the two central gyri. A double connection of the fissura Rolandi with the first frontal sulcus insulates the lower part of the upper half of the gyrus precentralis. The gyri parietales and two convolutions adjoining externally are markedly hypoplastic. In strong contrast therewith is the bulky development of the occipital lobe and adjacent parts of the second temporal convolution. This very unequal development of the various brain segments indicates defective cerebral equilibrium. Taking into account the extraordinary development of the sexual passion in this murderer, it was especially interesting to discover what parts of the brain showed a preponderance of growth, and to consider whether those parts could be associated with the cortical sexual life. In this case it would appear that the left occipito-temporal convolutions are the most important seat of cortical sexual life. The cranium bore as strong evidence of degeneracy as the brain. It was grossly asymmetric; the right fronto-parietal and fronto-temporal, and the left occipito-parietal and occipito-temporal regions were prominent, and the whole base of the occiput, particularly on the left side, bulged downwards. Internally and externally the cranial sutures were almost obliterated.—*British Medical Journal.*

Jacksonian Epilepsy following Influenza.—ERLENMEYER mentions the case of a physician, 25 years old, of previous good health, who was taken ill on January 5, 1890, with the typical symptoms of neurogastric influenza. There was no history of neuropathic disposition in the family. The patient complained until the end of January of sleeplessness, headache, pains in the legs, anorexia, constant eructations of gas and constipation. On the 1st of February, while eating, he notices a feeling of numbness in the left hand and forearm, followed by muscular twitchings in the same region and complete loss of consciousness. The attack which lasted two or three minutes was followed by vomiting, and small hemorrhages were observed to have occurred in the superficial tissues of various parts of the body, thus in both conjunctiva. A similar attack happened on the 8th of February, accompanied by strong convulsive movements of the whole left arm, but without loss of consciousness, the attack lasting three minutes. The facial muscles and speech were undisturbed. This attack was also followed by vomiting, which was frequently repeated during the next few days. From the 8th to the 18th he was subject to malaise and disturbed sleep; then complete recovery. Erlenmeyer considers the case one of Jacksonian epilepsy and believes that the preceding influenza was the chief cause of it. He thinks it probable that the convulsions were due to capillary hemorrhages in the cortex, similar to those observed in other parts of the body.—*Journal of Nervous and Mental Diseases*, April, 1891.

Psychoses in Influenza.—DR. JUTROSINSKY has recently published over twenty cases of psychoses following influenza which had been observed in the clinic for mental diseases in Strassburg and in Jolly's private clinic. In addition to these he collected a number of cases from the data of the epidemic of 1884. From the total number of cases he has drawn the following conclusions: (1) Only such persons are apt to have an attack of insanity caused by influenza as present a direct or indirect neuropathic disposition. (2) A psychosis may develop in any stage of influenza, but particularly during convalescence. (3) The different forms of psychosis may be met with, but in the majority of cases the insanity is of a melancholy, hypochondriacal nature. (4) The two sexes are equally liable to become affected, but the majority of cases occur between the ages of 20 and 50. (5) Among the insane, influenza appears to bring about an exacerbation of existing symptoms.—*Centralblatt f. klin. Medicin*, March 7, 1891.

Five Cases of Encephalopathia Saturnina.—The first of five cases reported by DR. TRIMBORN and observed by him at the general hospital of Cologne, belongs to the convulsive form of the encephalopathia saturnina, and was accompanied by severe paralytic symptoms of lead-poisoning. The patient had only one severe attack of eclampsia, made a relatively quick recovery from the effects of this, and there was no return of the attack. The second patient, who had worked 14 days in a white lead factory, presented symptoms much resembling those of meningitis tuberculosa. The results of the *post-mortem* examination were simllar to those of the fourth case, as mentioned below. In the third case the cerebral symptoms were typical and not marked by complications. The characteristic symptom of lead-poisoning—colic—did not show itself till after the cerebral lead-symptoms had disappeared. The disease began with coma (without convulsions), lasting several hours, from which the patient awoke presenting symptoms of severe mental depression that lasted several days, disappearing gradually with the other cerebral symptoms. There was, however, an interruption in this depression on the first evening of the disease, when great exaltation attended by hallucinatory delirium was present. The fourth case presented a typical picture of the saturnine eclampsia, terminating fatally. The chief results of the *post-mortem* examination in this as in the second case were: the absence of lead in the brain and the presence of cerebral anemia. The author is of opinion that in certain cases, and especially in those in which lead has been found absent in the brain, the cerebral symptoms are secondary, caused by a condition allied at least to that of uremia and depending upon a certain relationship of the poison to the blood and urinary organs, not leading to the development of albuminuria or degenerative nephritis. The last of the cases reported is an uncommonly severe one. The patient fell prostrate while at work as if he had received an apoplectic stroke, and remained for several days in a condition of stupor. After the lapse of 14 days, the patient was seized with an attack of eclampsia, followed by hallucinations and maniacal delirium. Eight days afterwards he had a second eclamptic attack, followed by deep coma. The patient was now entirely free from cerebral symptoms for 6 weeks, when convulsions again set in accompanied by a comatose condition lasting half a day. After this he slowly regained his health.—*Centralblatt f. klin. Medicin*, March 7, 1891.

Identification of Human Blood.—PROF. EWELL has recently expressed the following views upon this subject: In the use of the micrometric test no confidence can be placed in the result unless the errors of the micrometer employed, with reference to authentic standards, are known. Instruments used in investigation should be described. When the subject from whom the blood is derived continues during a short period in substantially the same condition of good health, there appears, in the hands of the same observer, to be an average size of the fresh corpuscles, provided at least 100 corpuscles are measured. There are such great discrepancies between the average obtained from the measurement of the fresh blood-corpuscles of animals of the same species and between measurements of the same objects by different observers, as to throw doubt upon published results. There is no advantage in using very high powers in such investigations. Drying of the blood-corpuscles in a clot multiplies the difficulties of identification. It has never been proved that dried corpuscles can be restored to their normal proportions. The mean size of the red corpuscles of very young animals is larger, and their size varies between wider limits, than in adults. Many diseases alter the size of red blood-corpuscles. Fasting diminishes their size and number, as also do many drugs. It is impossible in the present state of science to say of any given specimen, fresh or dry, more than that it is the blood of a mammal. Other conclusions are scientifically indefensible.—*Boston Medical and Surgical Journal*, January 29, 1891.

FORMULAÆ.

By Geo. B. Somers, M. D., San Francisco, Cal.

Aristol.—Richtmann recommends replacing iodoform in all cases by aristol. The latter is non-irritant, and its odor is not disagreeable. Its only drawback is its insolubility in water. It may be prescribed in powder, in ointment, or in solution. The following are the formulæ that the author employs:

Aristol	gm. 1
Ether	10

S.—For external use.

Aristol	
Castor Oil	aa gm. 1
Collodion	8

S.—To paint the affected parts.

Aristol	gm. 2
Vaseline	gm. 18

S.—To apply on the affected parts.

Aristol	gm. 3
Olive Oil	20
Lanoline	77

S.—To apply on burns.—*Nouveaux Remèdes*, Feb. 24, 1891.

Gargle to Prevent Dental Caries.

Tannin	gm. 5
Tincture of Iodine	
Tinct. of Myrrh,	aa. gm. 2½
Iodide of Potassium,	1
Rose Water	gm. 180—M.

S.—A teaspoonful in a glass of water, to be gargled every morning. —*Nouveaux Remèdes*, March 24, 1891.

PUBLIC HEALTH.

By W. R. Cluness, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 69 town districts of the State during the past month, in a population of 651,315, correspond to an annual rate of 18.12 a thousand, the total mortality having been 985. 121 deaths were due to zymotic diseases, giving an annual rate of 2.23 a thousand. Of these, 34 were due to diphtheria, 21 to typhoid fever, 8 to cholera infantum, 15 to diarrhea and dysentery, 4 to cerebro-spinal fever, 2 to scarlet fever, and 8 to whooping cough. 273 deaths resulted from diseases of the respiratory organs, giving an annual rate of 5.02 a thousand. Of these 149 were due to consumption, 92 to pneumonia, 21 to bronchitis, and 11 to pulmonary congestion; the rate being for consumption and pneumonia, 2.73 and 1.68, respectively. 60 deaths resulted from diseases of the heart. The average annual death rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 509,000, was 17.72 a thousand. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from San Jose; the lowest from Eureka and vicinity.

METEOROLOGY.

By J. W. Robertson, B.A., M.D., San Francisco, Cal.

Summary for May.—*Weather.*—Many cloudy days were noted, which but seldom resulted in rainfall. Probably on most days reported cloudy it was fog-bearing rather than rain-bearing.

Temperature.—Along the coast, the mean temperature of 55° was maintained, while in the valley belt it rose to 66°.

Rainfall.—As usual for May, the rainfall was light. According to the Signal Service report, there was a slight deficiency in Southern California and an excess in Northern California, but in neither instance was the divergence from normal very great.

California—Tabular Statement for May, 1891.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn .... Cal.	----	----	----	----	----	----	----	----	----	----	----	----	----	Southern Pacific Co.
Berkeley .... "	55.7	77.7	47.4	64.1	50.8	14 0	4	1.6	84.5	2	7	22	S.S.W.	Obs. Univ. of Cal.
Colfax .... "	66.5	92.0	49.0	----	----	----	3	1.7	----	----	----	----	S.E.	Southern Pacific Co
Eureka .... "	53.2	67.0	42.0	57.8	48.7	9.0	11	1.55	88.0	5	6	20	N.W.	Signal Service U.S.A.
Fresno .... "	66.4	95.0	47.0	81.6	52.6	29.0	2	0.03	52.5	19	11	1	N.W.	" " "
Keeler .... "	64.0	86.0	36.0	75 4	52.9	22.5	7	0.37	38.0	13	11	7	N.	" " "
Los Angeles ...... "	58.4	74.0	47.0	69.4	53.7	15.7	2	0.31	77.8	4	20	7	W.	" " "
Monterey .... "	56.4	66.0	46.0	----	----	----	2	0 09	----	----	----	----	S.E.	Southern Pacific Co.
Napa .... "	57.0	79.0	42.0	66.9	47.1	19.8	3	1.39	85.0	7	14	10	S.	Sta. Napa Ins. Asylum
Oakland .... "	----	----	----	----	----	----	----	----	----	----	----	----	----	Chabot Observatory.
Paso Robles ...... "	59.6	86.0	48.0	----	----	----	1	0.06	----	----	----	----	S.	Southern Pacific Co.
Red Bluff .... "	66.2	92.0	46.0	77.7	54.9	22.8	8	1.50	61.1	15	13	3	S.E.	Signal Service U.S.A.
Sacramento ...... "	62.0	88.0	46 0	73.7	51 8	21.9	4	0.66	74.4	19	9	3	S.W.	" " "
San Diego .... "	60.8	67.0	53 0	65.4	56.2	9 2	3	0 35	75.4	9	12	10	W.	" " "
San Francisco .. "	54.5	75.0	48.0	60.9	50.5	10.3	5	1.25	82.3	4	14	13	S.W.	" " "
Santa Barbara .. "	59.0	74.0	45.5	65.4	52.4	13.0	1	0.30	76.0	10	4	17	W.	Hugh D. Vail.
Santa Cruz ...... "	57.8	70.0	48.0	----	----	----	3	0.83	----	----	----	----	S.E.	Southern Pacific Co.
Yuma .... A. T.	73 9	100.0	54.0	88.9	59.5	29.5	0	0.00	39.3	28	3	0	S.W.	Signal Service U.S.A.

Blank (----) indicates data missing.

Occidental Medical Times.

JAMES H. PARKINSON, L. R. C. S. I., EDITOR.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: JULY, 1891.

PULMONARY TUBERCULOSIS.

PART I.—ETIOLOGY.

Some one has made the pertinent statement: "If we knew how to produce phthisis we could cure it." The rational therapeusis of a chronic disease is only successfully accomplished after a thorough acquaintance with its etiology, and modern phthisi-therapy founded on this fact, wields the formidable weapon, prophylaxis, in the accomplishment of its end. The important observation of Villemin, in 1865, that tuberculosis could be produced by innoculating animals with tuberculous material, served as the first correct guide to the study of tuberculosis. Since the brilliant discovery of Robert Koch, communicated to the Physiological Society of Berlin on the 24th of March, 1882, the infectiousness of tuberculosis could no longer be founded on theory and empiricism. This unassailable discovery of the tubercle bacilli as the special carriers of tuberculosis, absolutely established the infectiousness of the disease in question and the acceptance of the truism—no tuberculosis without the tubercle bacilli.

The first question evolved by the utilitarian from the accepted facts of the laboratory is, In what way does the tubercle bacillus enter the body? The ways are many and various. Experiments and clinical observation have shown infection to occur from the skin, and the so-called corpse tubercles of anatomists are now recognized as the habitations of tubercle bacilli. Authentic cases of tuberculosis are reported occurring in connection with ritual cercumcision where the operator, afflicted with tuberculosis, has sucked the wound made by circumcision for the purpose of stanching hemorrhage. Lupus is a tuberculosis of the skin, and Koch succeeded not only in demonstrating tubercle bacilli in the lupus nodules, but also in obtaining from them pure cultures of the bacilli. Another mode of infection is through the intestinal canal, by means of ingested infectious food. We now know that the pearly distemper of cattle is identical with tuberculosis in man, and recent observers have endeavored to prove the danger of using meat from such animals as food. A very important mode of transmission is that by the unboiled milk of cows affected with murrain. Investigations by Ballinger and others have shown that in nearly half of all tubercular animals the milk proves to be infected, even though the udders are not tubercular. As primary intestinal tuberculosis is infrequent, it is quite probable that many of the ingested bacilli are destroyed by the action of the gastric juice. Perhaps the most frequent avenue of infection is the respiratory apparatus, and in this connection investigations with the sputa of phthisical persons may be cited. Former hypotheses which supposed the bacilli to free themselves from their surroundings, or become diffused during the evaporation of fluids, or finally to be set free by currents of air, have been shown to be erroneous. It is now known that in order for bacteria to enter the respiratory apparatus the medium on which they develop must dry up and disintegrate into dust. The acceptance of this doctrine postulates the inhalation of dried bacilli as necessary for infection. Cornet demonstrated, in his painstaking investigations, that the tubercle bacilli are only met with in definite circumscribed regions, and usually about a phthisical subject. The sputa of the latter dries on the floor, on the linen, and on other objects, and the material containing the bacilli, or spores, is taken into the body with the inspired air. This mode of infection will account for primary infection of the lungs, larynx, or air passages as inoculation. Experiments show that the first extension of the tubercular process depends upon the point of inoculation. Cornet ascertained that the preservation of the sputum in pocket handkerchiefs is especially dangerous, for here it finds the best opportunity of quickly drying and being turned into dust. The bed-clothes also furnish an agreeable depot for the bacilli, and Cornet has showed that a hotel room, in which a phthisical actress had lived but a few weeks, contained a large number of bacilli. These significant facts stigmatize consumptives as constant sources of infection, and teach us an important lesson in prophylaxis. By preventing the sputum of phthisical persons from drying up, we prevent a frequent mode of infection. Persons should expectorate into a vessel filled with water, or into a closed spittoon.

Considering the ubiquity of the tubercle bacilli, and the many chances for infection, it is not unlikely, as one observer has remarked, "in the long run, everybody had a little tuberculosis." There are, probably, two reasons why more people do not become infected. The first, as maintained by Koch, is, that the tubercle bacilli are of very slow growth; that they do not readily remain in the body, but are eliminated before they have gained a definite foothold. Another and more important reason is, individual predisposition, which simply means that a debilitated organism, imperfect respiration, catarrhal affections of the air passages, etc., encourage infection, although no known observation favors any special condition as absolutely necessary for the certainty of inoculation. We once believed that scrofulous children had a special predisposition to tuberculosis, but we now know that the well-marked cases of scrofula are examples of tuberculosis, for tubercle bacilli have been found in connection with most of the "scrofulous" affections of bones and joints.

Not a single incontrovertible case of congenital tuberculosis has thus far been observed in man, which fact appears to nullify the theory of inherited tuberculosis. It is true that some competent observers have found tubercle bacilli in cattle, in the organs of embryos, but it is not proper to transfer conditions found in cattle to man. Fränkel, in his recent work on Bacteriology, aptly remarks: "That cases of tuberculosis occurring during the first months of life, thus far communicated, have proven open to the suspicion that they were the result, not of an inherited affection, but of one acquired at a very early period; *i. e.*, a genuine infection." Baumgarten, in reconciling the theory of inherited tuberculosis with the fact that the disease affects men in middle life, accepts the view that the germs transmitted by inheritance remain dormant for years, becoming only then acute when the resistance of the organism, from any cause, is reduced. The theory of Baumgarten becomes untenable in view of recent investigations which prove that there is no latency of tubercle bacilli. In the present state of our knowledge we are inclined to agree with Fränkel, that tuberculosis is an infectious disease caused by the tubercle bacilli, and transmitted to man through various ways, notably by inhalation of dried sputum from phthisical subjects.

DR. GEO. B. SOMERS.

Commencing with the present number a new department has been established under the charge of DR. GEO. B. SOMERS, of San Francisco. This department has been entitled "Formulæ," and it will include new remedies and methods of prescribing them, new combinations of well known remedies, and the formulæ of new treatments. The formation of this department has for some time past been under consideration, and we feel certain that DR. SOMERS will make it both interesting and profitable to the readers of THE TIMES.

MEDICINE AND POLITICS.

Under the heading "Science and Politics" the *Lancet* bewails the fact that the President of the English Board of Trade has "deliberately sacrificed the legitimate and beneficial aspirations of science at the altar of political expediency." The offense committed consisted in refusing incorporation (as we understand it) to the British Institute of Preventive Medicine, the grounds of refusal being that vivisection would be practised. The history of science and politics, as well as of medicine and politics, is, we opine, pretty much the same the world over, and we desire here to point a moral by briefly referring to two little bills that passed both houses of the late Legislature, one of which now is—whilst the other is not—a law.

The bills to which we refer are Assembly Bill 270 and Assembly Bill 578, and that our readers may judge of their merits, and observe their progress in the legislative halls, we reproduce them side by side below:

Assembly Bill No. 270, introduced January 15, 1891, and referred to Committee on Judiciary.

An Act to add a new section to an Act entitled "An Act to establish a Political Code of the State of California," to be called Section 2984, relative to the appointment of a State Sanitary Inspector.

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. A new section is hereby added to the Political Code, to be known as Section 2984:

Section 2984. The State Board of Health must appoint a regular physician in good standing, and of recognized sanitary qualifications, who shall be known as the State Sanitary Inspector, and who must perform such duties as said Board may require.

An annual salary of $3,000, together with actual and necessary traveling expenses incurred in the peformance of his duties, must be paid to him in the same manner as salaries and expenses of State officers are paid.

SEC. 2. This Act shall take effect immediately.

[Amended in Senate fixing expenses at $2,000 *per annum*, and placing appointing power in hands of Governor.]

Assembly Bill No. 578, introduced January 30, 1891, and referred to San Francisco Delegation.

An Act to create the office of Attorney for the State Board of Health and the Board of Health of the city and county of San Francisco.

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. The office of attorney for the State Board of Health and the Board of Health of the city and county of San Francisco is hereby created. Such attorney shall be appointed by the Governor, and shall hold his office as such attorney for the term of four years, and until his successor is appointed and qualified.

SEC. 2. It shall be the duty of such attorney to act for and represent the State Board of Health and the Board of Health of the city and county of San Francisco in all legal matters which may require their attention as such Boards of Health, and to specially represent and act for and in coöperation with said Boards of Health, when required by them, in the prevention of all acts and things which, in the judgment of said Boards of Health, or either of them, may have a tendency to be detrimental to the health of the people of the State; and in such other matters pertaining to the health of the State in general and the duties of said Boards of Health, to assist and aid them with his advice, and to represent and act for them in Court.

SEC. 3. The salary of such attorney shall be $3,000 per annum, and shall be paid out of the State Treasury, upon warrants drawn by the Controller, in the same manner as the salaries of other State officers are paid.

SEC. 4. All Acts and parts of Acts in conflict with this Act are hereby repealed.

SEC. 5. This Act shall take effect and be in force from and after its passage.

The Sanitary Inspectors' bill was not approved by the Governor, as it was desired to keep within the 50 cent limit, and for this purpose all bills that had not substantial backing were dropped. The Attorney's bill received the executive approval, partly, it is stated, because not carrying any appropriation with it, the 50 cent limit was not affected. Is any reader of this journal so guileless that he need be informed the legal profession rarely work for nothing, or that this salary will just as surely be presented as a deficiency bill at a future date?

It will be observed that the Attorney's bill, though introduced at a later date, made rapid and successful progress. Instead of going to a committee, the more harmonious course of reference to the "San Francisco Delegation" was adopted, and the bill in its original condition did not meet with a single obstacle. The Sanitary Inspectors' bill, though it had passed both houses of the previous Legislature and been thoroughly canvassed, was not to fare so easily. The first amendment placing the expenses at "not exceeding $2,000 *per annum*" is less open to objection than that which placed the appointing power in the hands of the Governor, at once injecting the vicious element of politics. The need of a State Sanitary Inspector has been fully recognized by the profession, if the State Board of Health is to accomplish a greal deal of necessary and indeed inevitable work. It was frequently stated, during the session of the Legislature, that the Board's executive officer received a salary, and should do some work for it. The salary of the Secretary of the Board ($2,500 *per annum*) is by no means munificent, and if that official attends to his business he will do sufficient work to earn it. To argue that the executive officer of the Board can inspect distant sections of the State, or proceed at an hour's notice to some locality from which an epidemic threatens, is to assume that there is no need for the existence of his office.

The duties of the new attorney are advisory to the State Board of Health and to the Board of Health of San Francisco, assisting either Board in prosecutions. The Attorney-General has in the past been the legal adviser of the State Board of Health, the services of a lawyer being occasionally employed on legislative matters. Under such acts as concern the Board the District Attorneys are the officers to conduct prosecutions. The demand for legal services, and the expenses in connection therewith, have hitherto been insignificant. In San Francisco the District Attorney is the adviser of the local board and also the prosecuting officer. The services of special counsel have been sometimes engaged, but the total expenses for these in any year have been quite small. We cannot find, on inquiry, that members of either of these Boards had urged the creation of the office; several certainly did not even know that the bill was before the Legislature. The bill has not been endorsed nor urged by our profession, and it is difficult to see any good reason for the existence of the office. It is true that prosecutions under the San Francisco Board may be more vigorously and expeditiously conducted in future, but if money was to be spent, were not health and market inspectors more needful? Why should not an attorney be appointed for Los Angeles, a large and growing city? And might not Oakland, being next in importance, also need the services of such an officer? Why should the State pay for an officer whose services will be almost exclusively devoted to San Francisco? The real reason for using the name of the State Board of Health in the matter was to evade the constitutional injunction against special legislation. The moral of our tale is, that when politics and medicine come together, medicine is ignominiously defeated, an inevitable result of a rule that knows no exception.

NOTES.

Editorial Changes.

Dr. Chas. W. Dulles has been succeeded as editor and publisher of the *Medical and Surgical Reporter*, by Dr. Edward P. Reichert. Under Dr. Dulles' management, the *Reporter* was greatly improved. The present editor has enlarged the number of pages from 28 to 40, bringing it more in line with other high price weeklies. Dr. H. A. Hare has been succeeded as editor of the *Medical News* by Dr. Geo. M. Gould, and editorials are again appearing in that journal.

The Gift of the Widow of Dr. H. Ferrer to the Medical Department of the University of California

The late Professor Arnold, of Heidelberg, used to say of Henry Ferrer as a student that he had one of the best "plastic" memories he had ever met with. An anatomical chart, plate or dissection, or a microscopical slide, was taken in, in all its details, and retained without effort, and his memory for the relationship of parts was invaluable to him as an operator in after life. With his love for objective study, Dr. Ferrer never lost his interest in well-prepared drawings and specimens illustrating some scientific point, and he had accumulated a large and costly collection of valuable illustrative material. We understand that Mrs. Ferrer has presented this magnificent collection to the Medical Department of the University, thus making the most valuable gift that the Medical Department has received since that of Prof. Toland.

The Journal of the American Medical Association.

The Journal of the American Medical Association is to remain in Chicago, and a permanent office may possibly be established there in the near future. The trustees have selected as its editor Dr. J. C. Culbertson, of Cincinnati, who has also been appointed business manager. Dr. Culbertson has edited and published two journals, the *Lancet-Clinic* and *The Obstetric Gazette*, and has made them pay; he has, therefore, had more practical experience in this work than any of his predecessors. To make the editor of *The Journal* also its business manager we regard as a grave mistake. To edit a medical weekly of the present standing of the Association journal, with its innumerable cares and responsibilities, should engage the entire time and attention of an active man. The business management should have nothing to do with the editorial department, and as its responsibilities are also considerable, it would require the services of an experienced man. We know nothing of the reasons that led to the retirement of Mr. J. Harrison White, the former business manager, but we do know that it is largely due to his efforts that *The Journal* is on its present sound financial basis.

The Removal of Gall Stones by Aspiration.

The daily papers occasionally discover operations and modes of treatment as original as they are wonderful, but we have rarely noticed a procedure surpassing the following. A lay contemporary states that a gentleman had for a long time suffered "with trouble in the region of the bladder." Recently his medical attendant (a homeopathic practitioner) operated upon him by running "a needle into the bladder and removing several gall stones." Upon further inquiry, we ascertained that a hypodermic needle was employed, and that the operator was subsequently able to demonstrate the presence of the stones by placing them under a good microscope. This is certainly a new operation. We have always been curious to learn what was meant by "homeopathic surgery," and what particular specialty a "homeopathic surgeon" practised. Whatever views might be entertained regarding the practice of medicine, it would certainly seem that there was only one kind of surgery. This operation, however, fully explains the situation, and we shall await with interest the further development of the case, which, we are informed, is in a fair way to recover, the tumor having been reduced about four-fifths in size.

A Preparatory Course for Students of Medicine.

The Illinois State Board of Health says that there is a growing demand for a literary course preparatory to the study of medicine. The Board outlines this course as being based on biology, and including thorough work in this science as well as in osteology, comparative anatomy, chemistry and physics, with English, French, German, some Latin, clay modeling, free-hand drawing, mineralogy, mathematics through trigonometry, mechanics, logic, general and pharmaceutical botany, and (in the last year) psychology. Such a course should extend over four years. The Board now requires that students matriculating in the autumn of 1891, or thereafter, must study medicine four years and must attend three courses of lectures—no two in the same twelve-month, in order to obtain a license to practise in Illinois. This rule will apply also in some other States. The Board will, however, recognize a thorough course in science, such as indicated above, as equivalent to two years' study and one course of lectures, thus enabling the student to enter the second class in the medical college. This makes the full time of study six years in the literary and medical schools, or two years less than is required of the student pursuing a strictly classical course. Not only will time be thus saved, but the science student will be much better prepared to enter the second course of the medical school than will the classical student to enter the first year. The Board has issued a circular of inquiry, embodying the foregoing suggestions, to colleges in the United States.

The American Society of Microscopists.

This association, now in the thirteenth year of its existence, will hold its fourteenth annual meeting in Washington, D. C., August 10th, and continue in session 5 days. Its roll of active members contains about 350 names, embracing very nearly every person in the United States who is at all prominent as a microscopist. Its membership consists of 2 distinct classes, viz.: professional men and students of the natural sciences, who use the microscope in their daily avocations as an instrument of research, diagnosis or precision; and amateurs, or those who find pleasure and profit in the revelations of the instrument. The qualifications for membership are very simple. The applicant must be a respectable person socially, and interested in the use of the microscope. The dues are trifling, only $2 per annum, and in return the member gets a volume of the annual proceedings, elegantly and profusely illustrated, which costs very nearly this amount. An announcement of the railway fares, hotel rates, etc., will be made hereafter. All persons, professional or amateur, interested in microscopy and not already on the rolls should send in their applications for membership to the Secretary, Dr. W. H. Seaman, No. 1427 Eleventh street, Washington, D. C. The application should be accompanied by $3, which is the initiation fee and one year's dues. Any further information concerning the Society or the approaching meeting may be obtained on addressing the President, Dr. Frank L. James, box 568, St. Louis.

The Inter-Continental American Medical Congress.

At the meeting of the American Medical Association, held at Washington, May 5th, 1891, Dr. Charles A. L. Reed, of Cincinnati, introduced the following: *Resolved*, that the American Medical Association hereby extends a cordial invitation to the Medical Profession of the Western Hemisphere, to assemble in the United States in an Inter-Continental American Medical Congress. *Resolved*, that the Committee on Nominations be and is hereby instructed to nominate one member for each State and Territory, and one each from the army, navy, and marine hospital service, who shall constitute a committee, which is hereby instructed to effect a permanent organization of the proposed Inter-Continental American Medical Congress, and to determine the time and place at which the same shall be held. These resolutions were unanimously adopted. Pursuant to the foregoing a committee consisting of one representative from each State and Territory was nominated and elected. The following are the representatives from the Pacific coast States and Territories: Arizona—Henry A. Hughes, M. D.; California—W. R. Cluness, M. D.; Idaho—Geo. P. Haley, M. D.; Nevada—P. J. Aiken, M. D.; New Mexico—C. E. Winslow, M. D.; Oregon—Wm. Boys, M. D.; Utah—F. S. Bascom, M. D.; Washington—J. M. Morgan, M. D. A meeting of the committee was held at "The Arlington," Washington, D. C., May 7, 1881, and the following officers were elected: Charles A. L. Reed, M. D., Cincinnati, O., Chairman; J. W. Carhart, M. D., Lampasas, Texas, Secretary; I. N. Love, M. D., St. Louis, Mo., Treasurer. The officers were appointed a special committee to draft a Constitution, and report the same at an adjourned meeting of the general committee, to be held in St. Louis, Mo., Wednesday, October 14, 1891, when the time and place of meeting of the Congress will be decided, and permanent officers will be elected.

Inhuman Cruelties to Animals.

It is well known that the greatest cruelties are practised upon animals intended for food, particularly beef cattle, principally in transportation from the ranges to the abbatoir. Many of these that consist in rough usage, close confinement in cars and steamers without the possibility of lying down, and with a limited supply of fresh air, food and water, seem almost inseparable from the traffic as now pursued. The effect, of course, on the meat is most injurious, rendering it in many cases really unfit for food. Steps have already been taken by the United States Government that may partly mitigate the horrors of the transatlantic trade, and progress in other directions will no doubt come when the public has fully awakened to the innumerable barbarities. These practices sink into insignificance beside the inhuman cruelties recently discovered in San Francisco. Three butchers in the employment of a wholesale firm were arrested at the instance of the Society for the Prevention of Cruelty to Animals. The sworn testimony of the Society's agents, as given in the *Daily Report*, shows what that paper characterizes as "the worst cases of cruelty ever tried in San Francisco." The heads of the cattle were drawn to the floor by means of a strong rope and windlass, so that the axmen could strike them between the horns. Often the steers would smell blood and become so wild that they pulled back. At this point the savages, who, in the language of the witness, "had long, slim, keen-bladed knives, would stand in front of a steer and run the knife into his eyes. With a quick turn of the wrist they would cut the eyes right out." In answer to an inquiry from the Judge as to there being the possibility of a mistake, the witness replied: "None at all, for I heard the poor animals bellow with pain, and saw them writhing. After they were dead I examined the eyeless sockets from which the knives had cut the eyeballs." This testimony was corroborated by another witness, who said: "It seemed to amuse them greatly to torture the cattle in their last hours. They stabbed them about the head and in the eyes, knocked their horns off with axes and almost twisted their tails out. Those men stand there all day killing cattle, and seem lost to all sense of feeling." The extreme punishment for this offense would be 6 months' imprisonment in the county jail, and the culprits received a nominal fine of $50. The only suitable or adequate punishment for offenses of this and others of similar character is the lash, and its wholesome deterrant effect is well known. The primitive savage, whilst inflicting torture, has been trained to bear it with stoical firmness. The domesticated savage, on the other hand, is invariably a coward, and a good dose of the "cat," that need not exceed his physical endurance, would be far more dreaded than a short term of confinement, that can hardly be even irksome to such a brutish nature.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, May 19, 1891.

The President, J. H. PARKINSON, in the Chair.

New Member.—M. H. WOOLSEY, M.D., was duly elected a member of the society.

DR. W. R. CLUNESS read a paper on the "Dual Duties and Obligations of the Medical Examiner in Life Insurance" (MEDICAL TIMES, Vol. V, p. 309).

Dr. G. L. SIMMONS, in opening the discussion, said that the greatest obstacle the Examiner in life insurance encountered was in obtaining a correct family history, as few were able to give the precise cause of death of relatives. Some applicants regarded "old age" as "middle life," and others considered "maternity" a sufficient cause of death. He believed that much profit might be derived from a careful study in any given locality of the two questions: (1) How many, and in what quarter, have mistakes been made by Medical Examiners in passing upon risks? (2) What hereditary diseases cause the most deaths?

Dr. G. A. White said that in fraternal organizations a rejection by the Examiner was often taken as a personal affront. Allowance should always be made for the statements of applicants regarding the amount of alcohol consumed.

Dr. H. L. Nichols did not believe that any professional relations existed between the Examiner and the company; he was simply an agent, just as an expert in fire insurance or milling. Companies went into the insurance business to make money, and there was no benevolence about them. The compensation allowed the Examiner was too small, when the amount at stake was considered.

Dr. W. A. Briggs said that the most difficult task was to obtain a correct family history. This would be lightened by the accumulation of vital statistics, and applicants should understand that the family history is most important. Life insurance rates should be graded, and a good risk with good habits should not pay the same rate as one whose habits were not so good. Statistics on this point would be of great value, as showing the monetary value of good habits.

Dr. H. Voeller said that in testing for sugar, Examiners were often misled when Fehling's solution was employed. The copper often contained iron, and the test would then be misleading and untrue.

Dr. C. B. Nichols believed that the presence of albumin in the urine was not always a sign of organic disease, and when found, an applicant should only be rejected after careful scrutiny of existing conditions.

Dr. G. G. Tyrrell—In some of the blanks the question occurs: "Do you consider the applicant a first-class risk?" This was difficult to answer, where a correct family history was not obtainable. He did not consider any person consuming ℥ii of alcohol daily to be a first-class risk.

Dr. J. R. Laine regarded the Medical Examiner as the confidential agent of the company, using his professional knowledge in its behalf, but there was very little sacredness about it. In case of albuminuria the presence of tube casts should decide the rejection. The statements of applicants regarding the consumption of alcohol were wholly unreliable.

Dr. T. W. Huntington could see no reason for making the Examiner anything more than a commercial quantity; no more sentiment existed in the case than between a bookkeeper and his employer. The Examiner should be an able diagnostician. The Equitable Life Assurance Society was at present engaged in compiling statistics of rejected risks; that is, the tracing up of persons who had been rejected, with a view to ascertain the value of the reasons upon which this action had been based. These statistics would, he believed, be of the utmost value.

Dr. W. H. Baldwin said that many applicants left the Examiner's office with much better ideas as to the manner of life they should lead.

Dr. Cluness, in replying, said the movement of the Equitable Life Assurance Society in the collection of statistics would be of the utmost value. A rejected applicant would often improve his habits, after rejection, and might therefore become an acceptable risk later on. It was largely true that the relationship between the Examiner and his company was simply commercial, but, on the other hand, the responsibility involved was very great.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Medical Education in the Provinces.—New Regulations in Paris.—A Municipal Medical Faculty.—A New Faculty at Marseilles.—Cures for Tuberculosis.

In the Provinces two decided steps in the educational march have been taken—one by government, the other by municipal authorities. Toulouse has a medical faculty created by government, or rather by the Minister of Public Education and Fine Arts, M. Bourgeois. Whether this step satisfies a need in the world of medicine is a question that can by no means be answered positively, but the negative appears a shade more probable than the affirmative. If this new faculty does not fulfil the needs of the students it does those of embryo professors, men of age and capacity, to be faculty professors and hospital surgeons, but who are, if lucky, only *chef de clinique* or *chefs de laboratories*, posts which bring absurdly small emoluments and very slight pay. In Paris, where, in the educational, scientific and medical worlds, most things that are, ought not to be, and most things that ought not to be are, there exist a number of distinguished men, who have only a secondary position, which means none at all, either in influence or salary. Their scientific worth may be well known and admitted, nevertheless they are nobodies and must consent to be patronized by the antiquated, far behind the age somebodies, who are full-blown professors, even "falling into the sere and yellow leaf" in addition, and perhaps members *de l'Institut*, etc. The Toulouse faculty has recruited many of its professors from these clever and able men, who, in consequence of Paris' mismanagement, are nobodies, and consent to be professors in a provincial faculty rather than remain at Paris, kicking their heels, waiting for deserved success which may never come. It is sad to see so much good material lying idle whilst the used up and useless tries to show off and refuses to be removed. The Marse new faculty is voted by the Municipal Council of Marseilles, and will be organized in the Chateau du Pharo. At present nothing is known regarding the election of the professors or any of its details. A desire to do the right thing is evidently alive among the originators of the scheme, whether they have the knowledge and liberal spirit necessary to insure the success of their undertaking remains to be seen. M. Delibes, one of the members of the Municipal Council of Marseilles, has collected 70,000 francs to be devoted to the improvement of the faculty laboratories.

In Paris there is one great step in advance, though it be only a *moral* one. The short-comings of the medical school and its organized system of teaching is admitted by many of the professors; whether they will see the remedy and have the courage to apply it, is another question; probably not, because it will mean sending a great number of them abroad, and this is not the age of self-sacrifice, even under the name of "voluntary" resignation or "retiring with honors." The able and amiable Dean of the Paris Medical Faculty is trying to do a little "patching up," but there are some stuffs that cannot be patched—the one in question is one of these. It is proposed to have eighty teaching professors appointed, among the professors *agrêgés*. The first question arises, where is the money to come from? The faculty is already overburdened by its expenses and unable to meet them; secondly, will new machinery work well by the side of old? Naturally it is only when the proposition is put in practice that judgment can be rendered. One new regulation is in working order, and its wisdom does not augur well for others that may follow. All students are now obliged to attend during one month at one of the lying-in hospitals attached to the medical faculty. Unless they can produce their certificates of attendance their medical studies cannot be completed. It is evident one month's study cannot be followed by very brilliant results, only a minimum of knowledge can be acquired. Furthermore, by crowding all the students into the wards of these hospitals it will be impossible for the professor to instruct them all; the cleverest and most studious will reap all the advantage; or, in other words, the minority, and the majority will waste their time. Prior to this even regulation medical students could acquire their knowledge in any maternity ward best suited to the purpose; wherever the *chef* was able and willing enough to instruct the students who went round the hospital with him. In the Paris hospitals there are a good sprinkling of *chefs*, who though not "faculty-clinical professors" do their work better than some who are. They arrive punctually, consider the needs of the students in order to acquire the knowledge to become able *accoucheurs*, and not their own special medical hobbies, which may perhaps keep them an hour or so interested by the bedside of a patient, but be thorough waste of time for the student who as yet has not acquired commonplace knowledge. These *chefs* may continue to be appreciated by their pupils for their valuable instruction, but working in their wards will not count with the faculty register, and the certificates of attendance of one month at a faculty lying-in hospital must be forthcoming. Internes, though they be an incarnation of Tarnier Depaul, Sims and Priestly, must be provided with their certificates of attendance before they can pass their thesis.

The Paris Municipal Council has not yet taken an active part in this educational crisis, but it is cogitating, and probably the results will soon be evident. There are rumors of a Paris municipal faculty being created and of the intention of that body of withdrawing from the different government faculty laboratories yearly sums now paid to them by it. What will be the organization of this municipal faculty, if created, is difficult to surmise, also its choice of professors. There is one current opinion, "politics will play a great part in the affairs." If this prove true, the proposed improvement will be a misfortune rather than a blessing. The choice of professors evidently should be based on their capabilities and not on their political opinions; but, alas, what should be is often the reverse of what is, in clever, brilliant Paris. The examples of this are legion, and are by no means absent in the half-asleep provinces.

M. Louis Malassez, of the Collège de France, has published a pamphlet entitled *Un Projet de Faculté de Mèdecine à Marseille, aperçu sur les reformes, a apportér à notre enseignement Médical*, in which he ably points out the faults of the present system and indicates the remedy. M. Malassez tells the truth and nothing but the truth, in his concise, well turned phrases, in which he demonstrates that the lectures of the Paris Medical School are not those calculated to meet the wants of the majority of students who attend. According to the present arrangements, first-year students may arrive when the lecturer is finishing his subject, the beginning having been "done" the previous year. The inadequate government grants to the laboratories the disadvantage of *concours* or competitive examinations for professors, are all calmly and ably analysed. The *esprit* of a *savant* is agreeably evident in M. Malassez' able pamphlet. All the facts for and against are kept in view and given their true value, neither more than less, and judgment is rendered with all the honesty of a true scientific mind.

Prof. Oscar Liebriech's remedy for laryngeal phthisis, but as he says, "not cures," has been tested by M. Cornil. At present the results are not very favorable, but it is too soon for judgment, either for or against, to be recorded. Nothing more is heard of Koch's kochine or tuberculin.

PARIS, May 5, 1891.

LONDON.

[FROM OUR OWN CORRESPONDENT.]

The Value of Tuberculin—Mr. Watson Cheyne's Demonstration—Prohibitive Prices of Tuberculin—The University of London—The Royal Society—The House of Lords' Committee—Influenza—Sir Joseph Lister's Oration—Marat, a Physician

The value of tuberculin has again become the chief topic of conversation here. This is due to the publication of papers by Dr. Heron and

Mr. Watson Cheyne, the physician and the surgeon to whom Professor Koch specially entrusted the testing of his remedy in this country. Dr. Heron reported on 30 cases of phthisis; he claimed "great improvement" in 5 cases; in 4 out of these 5 cases the disease was in its first stage—the ages of the patients ranging from 14 to 28 years In the case which did best—a woman aged 28, who was one of the patients inoculated before a large audience of medical men, early in December—the improvement in the general condition was very remarkable, and certainly of a degree seldom if ever noticed after other plans of treatment. In 13 other cases there was distinct improvement; 2 cases in the first stage did not improve, and 1 became worse. Of the 7 cases in the second stage all improved except 1—a man aged 36, whose condition was unaltered. Of the 7 cases in the third stage 3 became worse and in only 1 was there decided improvement. Improvement was noticed in all the 5 cases of lupus, but there was cure in none; indeed, in the best case fresh nodules made their appearance beyond the apparent early limits of the disease during the treatment. Dr. Radcliffe Crocker took on the whole a most gloomy view of the value of tuberculin in lupus, saying that so far as the permanence of the results went the remedy did not compare favorably with scraping. The plan of treatment he recommended was: (1) Thorough scraping. (2) The application of strong acids; and (3) Tuberculin.

There was a very large audience at the meeting of the Royal Medical and Chirurgical Society, on April 28th, to hear Mr. Watson Cheyne's paper. The exhibition of cases, demonstration of microscopic slides and reading of the paper occupied an hour and a half; and in addition, every Fellow attending received a pamphlet containing an elaborate tabular statement of all the cases—56 in number—which he had treated. I shall not attempt to analyze these tables, as such a study hardly comes within the scope of this letter. It will suffice to say that the paper produced a very strong effect on those who were present. Knowing that Mr. Cheyne was a trusted ally of Dr. Koch's, many persons had gone to the meeting in expectation of hearing an *ex parte* defense of tuberculin; instead of this they heard a very judicial view expressed in most temperate language. The microscopical evidence obtained from tuberculous synovial membrane was very striking, proving, as it seemed, quite conclusively that tuberculin has the power of causing tubercle to obsolesce, the characteristic epithelioid and giant cells becoming replaced by a young, small, celled growth; fibroid organization taking place later on. Unfortunately, these changes were only observed in isolated tubercles, or in those at the periphery of large patches; the tubercles in the deeper part of such patches appeared to be unaffected.

Apart altogether from the merits of the remedy, the feeling against Koch is in some quarters very strong, and some very hard things were said at the Medical Society after the reading of Dr. Heron's paper, on April 20th. It is impossible for the warmest admirers of Dr. Koch not to feel that there has been much, and still is much, which is opposed to the best traditions of the profession. The price still charged is almost prohibitive in the case of hospital patients; Mr. Cheyne's 56 patients must have cost him close on $1000—one case alone is at the present time costing $1.25 a day. Further, many physicians and some hospitals still find it difficult to obtain tuberculin, while at the same time wholesale chemists are advertising it for sale. Professor Koch is not coming to the International Congress of Hygiene in London, in August, but he will probably send a representative; it is to be feared that he will not receive quite as warm a welcome as would have been accorded a year ago.

The University question in London is still unsettled; is, in fact, in an acuter stage than ever. The senate of the University has drawn up a new draft charter, which is to be submitted to convocation on May 12th. The charter proposes to give the Royal Colleges of Physicians and

Surgeons and all the London medical schools representatives on the senate and the Boards of Studies. It also proposes to give similar representation, but on a smaller scale, to the provincial colleges. The scheme is opposed by University and Kings Colleges, and by the provincial colleges; and the grounds of objection in both cases are that the respective colleges are not granted a sufficiently influential position. Convocation will very probably reject the scheme, and then the whole of the work of the last five years will, it would seem, be thrown away. Meanwhile, five-sixths of the London students cannot, or at least do not, obtain a degree of M. D., and this is considered to be a grievance and an injury to them in practice.

The *conversazioné* at the Royal Society, on May 6th, was chiefly remarkable for the display of electrical novelties and the almost complete absence of biological exhibits. The greatest novelty was the selenium battery alarm bell. It can be adjusted so that either the appearance or the extinction of a light will ring an alarm. In the list of new Fellows of the Royal Society only two biologists appear, and only one of these is directly connected with the medical profession—Dr. Cunningham, the Professor of Anatomy in Dublin. This temporary extinction of the biological sciences at our great scientific centre is attributed to the long indisposition of Professor Michael Foster, who is just now the *arbiter scientiarum* in matters physiological, having succeeded Professor Huxley, who was all-powerful after the death of Professor Sharpey.

The House of Lords committee is still sitting, and is now hearing evidence from the special hospitals and from general practitioners. The latter have not made out their case as well as it was thought they would have done. They have dealt too much in generalities and strong language. The most astonishing piece of evidence as to the big general hospitals was the statement by one of the lay officials of St. Thomas' that that institution, with gross receipts of something like $350,000, is only able to show a net income of $200,000.

"Influenza" has again become a standing headline with the daily papers. The first cases were recognized in Hull soon after, it would seem, the reöpening of the Baltic trade. It spread rapidly over the eastern part of Yorkshire, which is mainly agricultural; farm operations were stopped in many villages, every able-bodied man being struck down by the disease; but the mortality has been low. The epidemic reached Sheffield at about the same time, and the mortality among the well-paid operatives who follow the unhealthy trades for which that town is famous has been very high; the death rate is reported to have reached 70. per mille. London so far has suffered but slightly, but within the last week the epidemic has become very prevalent in the Midlands, in Birmingham especially, where the profession has already to lament the death from secondary pneumonia of Mr. Bartleet, Senior Surgeon to the General Hospital. No new cure has been announced as yet.

Sir Joseph Lister's oration before the Medical Society occupied nearly an hour and a half in delivering. It dealt with the physiology of blood-clot, and the great surgeon prepared for it by temporarily absenting himself from all his ordinary duties. It is to be published in the journals on May 16th, so that you will not expect me to enter into any discussion of it; but it will be found to be a thoughtful and philosophical contribution to the subject.

Two long-forgotten tracts of Marat, the French revolutionist—the very existence of which have been denied by French writers—have been found in London, and will probably be published by subscription, under the editorship of Mr. Bailey, the librarian of the Royal College of Surgeons. The one deals with an eye disorder due to mercury, the other with the treatment of gleet. It has been generally supposed that Marat was a veterinary surgeon, but there seems to be no doubt that he was qualified as a medical man, and actually practised in Greek street, Soho, London. It was during this period that these two tracts, which are written in English, were published.

LONDON, May 10, 1891.

OBITUARY.

DR. A. W. SAXE.

ARTHUR WELLSLEY SAXE died at Paraiso Springs, Monterey county, May 20, 1891, of cardiac disease. Dr. Saxe was born in the city of Plattsburg, Clinton county, N. Y., in the year 1820. At the age of 13 years he removed with his parents from Plattsburg to Sheldon, Vt., and four years afterward entered the preparatory department of Wesleyan University at Middleton, Conn., which he attended until 1840, when in his 20th year he entered the Castleton Medical College at Castleton, Vt., at which he graduated in 1843. He first practised medicine at Swanton, Vt., until 1850, when he removed to California, where he practised in the gold diggings in various sections of the State, until he finally located at Santa Clara, where he has since resided. In 1844 he was married in Sheldon, Vt., to Mary Elizabeth, daughter of Mr. Frederick Judson, who, with their two children, Fred J. Saxe, a surgeon and dentist, of Oakland, and Dr. Frank K. Saxe, of Santa Clara, survive him. Dr. Saxe was well known as a skillful physician, and enjoyed a large practice in Santa Clara. He was a member and one of the founders of the Santa Clara County Medical Society and a member of the Medical Society of the State of California, being chosen President in 1880. In 1884 he was elected State Senator, and served his term in the Legislature with credit to himself and to his profession. Dr. Saxe was well known throughout the State, and for many years had been a prominent member of the State Society, invariably present at its meetings and always joining in the discussions. He took a great deal of interest in the subject of leprosy and was ever on the alert for anything that might throw more light on the subject Dr. Saxe was universally liked and respected by the profession. He was ever a staunch and warm friend of this journal, being amongst our earlier subscribers and always ready with cheering encouragement and assistance.

DR. G. H. EVANS.

GEORGE HAMPTON EVANS died at Dixon, Cal., February 23, 1891, the immediate cause of death being pleuritic effusion. Some time prior to his death, on returning from a country trip, after unharnessing his horse, he urged him to enter his stall, but the animal, seeing the door open, turned around, rushed out suddenly, and the Doctor, in his efforts to prevent his escape, was caught between the horse and the jamb of the door and badly injured. Pleuritic effusion in both chest cavities followed, necessitating aspiration. After the second operation the sense of suffocation occasioned by the fluid continued, his heart became weak and he never fully rallied. He was born in Claiborne county, East Tennessee, December 12, 1827. He graduated with honors from Tuscalum College, East Tennessee, then commenced the study of medicine, afterwards matriculating in the Nashville Medical College, from which he subsequently graduated. He then located in Greenville, Tenn., where he practised his profession until 1869, when he came to California, and after a brief sojourn in Suisun, finally located at Dixon, where he continued in practice until a few weeks before his death. In 1854 he was married to Miss Mary Jane Wilson, who, with their family of three daughters, all married, survive him. Dr. Evans was a man of culture, possessing a thorough classical education, and he was a diligent student until his death. He retained his knowledge of the Latin language perfectly, and would often quote lengthy passages from a favorite ode, Horace being his particular favorite. He was a member of the Presbyterian Church and a Mason, belonging also to other fraternal organizations. He was a successful practitioner, a genial friend, an honorable gentleman, and sincerely beloved by all who knew him. A. T.

REVIEWS AND NOTICES.

THE UTERUS AND ITS APPENDAGES.

A lithographed wall chart of these organs, with key attached, has been printed by the Dios Chemical Company, of St. Louis, for gratuitous distribution amongst the profession.

ORIGIN, PURPOSE AND DESTINY OF MAN, OR PHILOSOPHY OF THE THREE ETHERS. By William Thornton. Boston: Published by the author.

In one of his gastric crises Carlyle remarked that the British public consists of fifty million people—mostly fools. The author evidently intended this book for the British public and not for the readers of THE TIMES. The work from beginning to end is purely imaginative.

A COMPEND OF GYNECOLOGY. By Henry Morris, M. D., late Demonstrator of Obstetrics and Diseases of Women and Children in the Jefferson Medical College, Philadelphia, etc., with 44 illustrations. Philadelphia: P. Blakiston, Son & Co. pp. xii—166. Price, cloth, $1; interleaved for notes, $1.25.

This little book is a safe and conservative, but incomplete, guide to the student and junior practician. If judiciously used in conjunction with the larger text-books it will serve a useful purpose.

PRACTICAL NOTES ON URINARY ANALYSIS. By W. B. Canfield, M.A., M.D., Chief of Chest Clinic and Lecturer on Clinical Medicine, University of Maryland; Visiting Physician to the Union Protestant Infirmary. Physician's Leisure Library. Detroit: Geo. S. Davis. pp. vi–93. Cloth, 50 cts.; paper, 25 cts.

The object of these notes, after reviewing the general character of the urine, is to show the really reliable tests for detecting its various constituents. The author points out little errors occurring in the examination of the urine, which are extremely practical. The book is amply illustrated, and will prove of great value to the practical physician. Like other numbers of the "Physicians' Leisure Library," this book contains many avoidable typographical errors.

THE NEW METHOD IN CERTAIN CHRONIC DISEASES.—By W. E. Forest, B. S., M.D., member of N. Y. Academy of Medicine, etc. New York: M. L. Holbrook & Co. pp. 123.

The address of this booklet to the literary editor of THE TIMES, in conjunction with internal evidences, various and sundry, indicates that it was intended for the laity only. For the information of the professional reader, however, it may be stated that the new method consists essentially in industrious flushing of the alimentary canal fore and aft. These simultaneous attacks, front and rear, would seem to be eminently calculated to inspire the enemy with a wholesome fear and incline him to evacuate his strongholds. At any rate, all of the cases reported by the author terminate, as a recent convert to the new method assured the reviewer, "Very fortunately, indeed, sir, very fortuitously."

GEO. P. ROWELL & CO.S' BOOK FOR ADVERTISERS. New York: Geo. P. Rowell & Co. Price $1.

This volume, representing the 179th edition of a work that is known to advertisers throughout the United States, contains all the essential information to be found in the "American Newspaper Directory," *without* the advertisements. Its 368 pages contain in compact and carefully classified form all the information really needed by an advertiser, and a great deal of other matter that will prove very valuable if rightly used. True, as "all roads lead to Rome," so all suggestions, pointers or tips indicate Geo. P. Rowell as the proper medium through which to transact business. Still the firm distinctly states that it need not be employed, that its services are available and may be used as an adviser only, if an agent be not required. Readers of this book should bear in mind the old adage, that "sauce for the goose is sauce for the gander," and whilst the advertiser can solace himself with the sauce to be found therein, the publisher will do well to heed the lessons to be read between certain lines of small type.

ANNUAL METEOROLOGICAL REVIEW OF THE STATE OF CALIFORNIA FOR THE YEAR 1890. By the Meteorological Department of the State Agricultural Society. Compiled by Sergeant James A. Barwick, Observer Signal Corps, U. S. Army, and Meteorologist to the State Board of Agriculture. Sacramento: State Printing Office.

This volume, as usual, contains a large amount of tabular matter relating to California weather, conveniently arranged. The weekly weather crop bulletins that proved so successful last year, have also been included. A number of valuable scientific papers have been furnished by Lieutenant Finley, in one of which we notice his allusion to the necessity of stations in the Aleutian Archipelago and British Columbia, the existence of which, with telegrapic communication, would enable the prediction of storms in Washington, Oregon and California long in advance of their arrival. In a review of the viticultural industry we notice that California has, at Vina, Tehama county, the largest vineyard in the world, 3,800 acres, and in Santa Barbara county, the smallest, a single vine, of the mission variety, 68 years old, whose branches cover an area of 12,000 feet, producing annually from 10,000 to 12,000 pounds of grapes.

MATERIA MEDICA AND THERAPEUTICS WITH SPECIAL REFERENCE TO THE CLINICAL APPLICATION OF DRUGS, By John V. Shoemakor, M. A., M. D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia, etc. VOL. 2, OF A TREATISE ON MATERIA MEDICA, PHARMACOLOGY, AND THERAPEUTICS. Being an independent volume upon drugs. Philadelphia: F. A. Davis. Cloth, $3.50; sheep, $4.50.

After several months' delay the second volume of Shoemaker's Materia Medica, Pharmacology and Therapeutics has been issued. It bears out the character of the first volume as an essentially practical work. Model prescriptions are interspersed throughout its pages, and formulæ for hypodermic use are frequent. That the work has been brought up to date is well shown by the article on Koch's Tuberculinum, which is most fairly discussed by the author, and with rather a favorable recommendatiou. In perusing the pages devoted to the special consideration of drugs, their pharmacology, physiological action, toxic action, and therapy, one is constantly surprised at the amount of material compressed in so limited a space. The book will prove a valuable addition to the physician's library.

A Treatise on the Diseases of the Nervous System. By William A. Hammond, M.D., Surgeon-General U. S. Army (retired list), late Professor of Diseases of the Mind and Nervous System in the College of Physicians and Surgeons of New York, etc. With the collaboration of Graeme M. Hammond, M.D., Professor of Diseases of the Mind and Nervous System in the New York Post-graduate Medical School and Hospital; Fellow of the New York Academy of Medicine. With 118 illustrations, ninth edition, with corrections and additions. pp. 932. New York: D. Appleton & Co.

This, the ninth edition of Dr. Hammond's well known and popular treatise, has been thoroughly revised with the assistance of his son, and, while surpassing previous editions, it still lacks completion. Many important neuroses; *e. g.*, tetany and angina pectoris, receive no consideration. Undue prominence is given to obscure affections like acromegaly, myxedema, etc., while the diseases ordinarily encountered meet with inconsiderate attention. A number of the illustrations are crude and superannuated, and do not altogether harmonize with the many good qualities of the work. Owing to the numerous deficiencies, the book cannot be recommended as a work of reference in the study of nervous diseases.

Lectures at St. Peter's (in 1890) on Some Urinary Disorders Connected with the Bladder, Prostate and Urethra. By Reginald Harrison, F. R. C. S., one of the Surgeons to the Hospital; Hunterian Professor of Pathology and Surgery at the Royal College of Surgeons of England. London: Ballière, Tindall & Cox. pp. 81.

In a series of six lectures Mr. Harrison has reviewed in a practical manner the most common forms of prostatic, urethral and vesical disorders. The two lectures upon prostatic obstruction, its prevention and early treatment, and the operative treatment in advanced forms contain much that is encouraging to that large class of practitioners whose experience has in the main confirmed the *dicta* of their early teachers as to the hopelessness of such cases, and the surety that permanent catheter life will sooner or later be established. To those accustomed to a successful resort to internal urethrotomy the author's views will prove disappointing. His favorite method of treating urethral stricture is by gradual dilatation, a method which seems to us as little better than a temporary makeshift. In the main, however, the author's views are in advance of the age, and his little work is an acquisition to such as are interested in urino-genital surgery.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a regular meeting of the Board of Examiners, held June 2d, the following physicians were granted certificates to practise medicine and surgery in this State:

Carl Schwalbe, Los Angeles; State Board of Health, Canton of Zurich, Switzerland, April 27,'63; University of Bonn, Germany, Mch. 29,'62.
W. C. Patton, Lemoore; Coll. Phys and Surgs., Keokuk, Iowa, Feb. 28,'82.
R. S. Brown, Colfax; Columbus Med. Coll., Ohio, Mch. 1,'83.
H. D. Percival, Los Angeles; Med. Coll. of Ohio, Mch. 8,'83.
R. L. Sutherland, San Francisco; Louisville Med. Coll., Ky., Feb. 24,'91.
F. X. Voisard, Yolo; Med. Dept. Victoria Univ., Canada, Apr. 1,'91.
A. N. Beach, San Francisco; Bellevue Hosp. Med. Coll., N. Y., 1870
Wm. F. Channing, Pasadena; Univ. of Pennsylvania, Apr. 4,'44.
Lydia H. Labaume, Pomona; Woman's Hosp. Med. Coll., Ill., Apr. 21,'85.

Chas. C. Wadsworth, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from May 16, 1891, to June 16, 1891.

Captain Edward C. Carter, Assistant Surgeon, will proceed without delay to Fort Canby, Wash., and report to the commanding officer for temporary duty, relieving Major John D. Hall, Surgeon, who will proceed to Fort Sherman, for duty as Post Surgeon. Par. 1, S. O. 74, Dept. of the Columbia, May 22, 1891.

Upon recommendation of the Medical Director of the Department, Assistant Surgeon D. Scott Moncrieff, now at Portland, Oregon, will proceed to Fort Walla Walla, Wash., and report to the commanding officer for duty at that post. Par. 1, S. O. 75, Dept. of the Columbia, May 23, 1891.

The leave of absence for seven days, granted Major Benjamin F. Pope, Surgeon, in orders, No. 74, Whipple Barracks, Arizona, May 19, 1891, is extended ten days. Par. 1, S. O. 61, Dept. of Arizona, May 26, 1891.

The extension of leave of absence, on account of sickness, granted Captain Henry P. Birmingham, Assistant Surgeon, in S. O. 108, May 12, 1891, from this office, is further extended to June 21, 1891, on S. C. D. Par, 6, S. O. 125, A. G. O., June 2, 1891.

Par. 1, S. O. 74, May 22, 1891, Dept. of the Columbia, transferring Major John D. Hall, Surgeon, from Fort Canby, Wash., to Fort Sherman, Idaho, is confirmed. Par. 4, S. O. 126, A. G. O., June 3, 1891.

Official List of Changes in the Medical Corps U. S. Navy (Pacific Station) from May 20, 1891, to June 20, 1891.

Medical Inspector Geo. R. Brush, from U. S. S. "Omaha," ordered home.

Passed Assistant Surgeon V. C. B. Means, from U. S. S. "Omaha," ordered home.

ITEMS.

A Manual of Clinical Diagnosis.—In our review of this work, the price was incorrectly stated as $1 00. It should have been $1.50.

Dr. Sam'l O. L. Potter, of San Francisco, having passed the requisite examination, was duly admitted a member of the Royal College of Physicians, London. Dr. Potter had been seriously ill, and, in fact, committed the grave imprudence of attending examinations with a daily temperature of 101° F., with evening exacerbations.

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EFFERVESCENT

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SODA.

Useful in Nervous Headache, Sleeplessness Excessive Study, Over Brain-work, Nervous Debility, Mania, etc.

Dose:—A large teaspoonful, in water, containing

R. Caffein, - - 1 gr.
Bromide Soda, 30 grs.

PROPERTIES.—It is claimed by some prominent specialists in nervous diseases that the Sodium Salt is more acceptable to the stomach than the Bromide Potassium. An almost certain relief is given by the administration of this Effervescing Salt. It is also used with advantage in INDIGESTION, DEPRESSION following alcoholic and other excesses, as well as NERVOUS HEADACHE.

FOR RHEUMATISM AND GOUT,

EFFERVESCENT

BROMO

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LITHIA.

Each dessertspoonful contains

℞ **Salicylate Lithia, 10 grs., and Bromide Soda, 10 grs.**

A remedy in the treatment of

RHEUMATISM GOUTY DIATHESIS, etc.

Dr. A. Garrod, the well known English authority on Gout, who was the first physician to introduce the Lithia Salts in the treatment of the gouty diathesis, states that their action is materially increased by being administered in a *freely diluted form.* This effervescing salt of Lithia furnishes an easy and elegant way of applying Dr. Garrod's methods.

FOR INFLUENZA AND NEURALGIA,

WM. R. WARNER & CO'S EFFERVESCENT

ANTALGIC SALINE.

Each dessertspoonful contains Antipyrine, 4 grs.; Salicylate of Soda, 4 grs.

(Warner & Co's Compressed Antalgic Tablets contain 2 grs. each.)

Preparations supplied by all Leading Druggist.

WARNER & CO'S

PIL: ANTISEPTIC COMP.

Each pill contains:

Sulphite Soda......1 gr.
Salicylic Acid......1 gr.
Ex. Nux Vomica..$\frac{1}{8}$ gr.
Powd. Capsicum..$\frac{1}{10}$ gr.
Conc. Pepsin...... 1 gr.
Dose 1 to 3 pills.

Pil. Antiseptic Comp. is prescribed with great advantage in cases of Dyspepsia, Indigestion and malassimilation of food.

WARNER & CO'S

PIL: ANTISEPTIC.

Each pill contains:

Sulphite Soda.......1 gr.
Salicylic Acid.......1 gr.
Ext. Nux Vomica....$\frac{1}{4}$ gr.
Dose 1 to 3 pills.

Pil. Antiseptic is prescribed with great advantage in cases of Dyspepsia attended with acid stomach and enfeebled digestion, following excessive indulgence in eating or drinking. It is used with advantage in Rheumatism.

Please specify (WARNER & CO.) to avoid substitution.

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AGENTS IN SACRAMENTO:

KIRK, GEARY & COMPANY

New Route to Bartlett Springs

THE MANY AND VARIED ATTRACTIONS.

The Southern Pacific Company, in connection with William Spiers and L. E. McMahan & Sons, has put in operation a new route to Bartlett Springs, that gives the visitor to that famous resort the most delightful trip that can be made in the State, for it is a combination of short rail. steamer and stage rides, which bring into view the most charming scenery of Central California. None of the various divisions of the route are long enough to weary the traveler, and all have distinct charms of their own.

Passengers from San Francisco leave by the ferry at 7:30 A. M., cross the bay to Oakland Pier, run up the bay by rail to Vallejo Junction, cross the Straits to Vallejo, pass up the Napa Valley by rail to Calistoga, arriving at 10:45 A. M.; take Spiers' stage over Mount St. Helena to Lower Lake Landing, arriving at 4:00 P. M.; take the steamer on Clear Lake for a run of twenty-one miles, arriving at Bartlett Springs Landing at 5:30 P. M.; take stage to Bartlett Springs, arriving at 8:30 P. M.

Passengers from Knights Landing, Marysville and Woodland will leave by train No. 50, connecting at Davis with the train which leaves Sacramento at 6:15 A. M., arriving at Suisun at 7:40 A. M., and connecting there with local train at 7:45 A. M., and at Napa Junction at 9:30 A. M. for the Calistoga train.

This new route is so full of interest, and is so great a novelty that a short description of its less familiar features is timely. Not everybody has seen the Napa Valley, and yet every mile of it is a picture. Compared with the Santa Clara Valley it is narrow, and yet it is wide enough to contain some of the prettiest towns and most famous vineyards in California. The railroad forms a lane through miles of fruit orchards and beautiful vineyards, while every one of the great stone wineries of the valley is close to the road.

The valley closes in at Calistoga, and to the right towers the gray summit of Mt. St. Helena, 4,500 feet high. Mr. Spiers' fine new Concord stage, drawn by six spirited horses, takes the passengers at Calistoga and dashes away toward the gray old dead volcano. As the road rapidly ascends the mountain the upper end of Napa Valley, with Calistoga in the centre, unfolds like a panorama, and the scene is charming. In a few minutes an elevation of 3,000 feet is reached, the highest point attained by the stage.

Fresh horses are taken at the Toll House, and Middletown is reached at 1:00 P. M. for luncheon, which Hank Moore serves with his old skill. The Langtry-Gebhardt stock farm is near, but not in sight, Fresh horses are taken at Middletown, and again at Greene's ranch fresh horses are taken, and the run is made down through the pretty town of Lower Lake, and then on across Cache Creek, the outlet for Clear Lake, to Lower Lake Landing, where L. E. McMahan & Sons, proprietors of Bartlett Springs and of the steamer and stage lines from Lower Lake Landing, take charge of the passengers.

They board the *City of Lakeport*, the largest, prettiest, swiftest and most comfortable steamer on Clear Lake, for a charming cruise of twenty-one miles. The steamer is commanded by Capt. Cal. C. McMahan, one of the owners, and the graceful little craft clips along at a rate of fourteen miles an hour.

Those who have never seen this charming sheet of water have a rich treat in store. It lies peacefully in a vast mountain-rimmed cup; and the shore, whether a steep slope or a cosy little valley and sand beach, is every mile of it a most charming picture. The steamer reaches Bartlett Springs Landing at 5:30 P. M. McMahan's fine stage, drawn by brisk horses, driven by Ed. Walker, now takes the passengers over the splendid new turnpike to Bartlett Springs. For several miles the road ascends till the summit, 3,500 feet high, is reached.

This view of the lake is the noblest and handsomest bit of scenery between Lake Tahoe and the ocean. The horses now trot gayly down the grade and finally the big hotel of Bartlett Springs, nestled among its hundred cottages, welcomes the travelers.

Here guests, in number from eight hundred to one thousand, find many ways of amusing themselves. The owners of the property, enterprising and intelligent men, have been specially fortunate in securing H. S. Greeley as manager. The changes and improvements made by this well known hotel manager are as radical as they are gratifying, and it is to be hoped that he can be retained permanently.

On this route to Bartlett's the traveler is taken past all the well known mineral springs of Napa county. At Calistoga, stages for the Geysers and the petrified forest connect with the train, and the route in Lake county passes close to such well known health resorts as Ziegler's Springs, Howard Springs, Adams' Springs, Harbin's Springs and many others.